

**APPENDIX D**  
**CLA 2001 REPORT**

**CITY INVESTIGATION OF POTENTIAL ISSUES OF  
CONCERN FOR COMMUNITY FACILITIES DISTRICT NO. 4  
PLAYA VISTA DEVELOPMENT PROJECT**

Prepared by  
City of Los Angeles  
Office of the Chief Legislative Analyst

May, 2001

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- Comment Letter #1: Howard Hackett, Past President Del Rey Homeowners  
Comment Letter #2: Alfredo Urso  
Comment Letter #3: Debra-Lynne Terrill  
Comment Letter #4: William Bryant, Program Manager, Active Faults, California  
Department of Conservation, Division of Geology and Mines (also  
see Comment Letter #23)  
Comment Letter #5: Airport Marina Group Sierra Club, Ballona Ecosystem Education  
Project, Grassroots Coalition, and Spirit of the Sage Council  
Comment Letter #6: Patricia Trujillo  
Comment Letter #7: Julia Judge  
Comment Letter #8: Thomas Judge  
Comment Letter #9: Patricia McPherson, President, Grassroots Coalition; Rex Frankel,  
Chair, Ballona Ecosystem Education Project; Kathy Knight,  
Special Projects Coordinator, Spirit of the Sage Council and  
Conservation Chair, Airport Marina Group Sierra Club  
Comment Letter #10: Rose MacHardy  
Comment Letter #11: Jonathan Aurthur  
Comment Letter #12: 132 Form Letters with original individual signatures delivered by  
Playa Capital Companies, LLC  
Comment Letter #13: Stewart Morris  
Comment Letter #14: Leslie Purcell  
Comment Letter #15: Rick Archer, USC Earth Sciences  
Comment Letter #16: Marcia Hanscom, Executive Director, Wetlands Action Network;  
Robert van de Hoek, Chair, Sierra Club Ballona Wetlands Task  
Force  
Comment Letter #17: John Geroch, Associate Engineering Geologist, Site Cleanup Unit  
I, California Regional Water Quality Control Board, Los Angeles  
Region  
Attached Memorandum from Julio Salinas, Ph.D. Hazardous Waste  
Toxicology Section, Office of Environmental Health Hazard Assessment  
to John Georch, LARWQCB  
Comment Letter #18: Suzanne M. DeBenedittis  
Comment Letter #19: Faye Ku  
Comment Letter #20: Bryan Gordon  
Comment Letter #21: Michael De La Torre, Southern California as Company  
Comment Letter #22: Kenneth E. Trott, Environmental Coordinator, California  
Department of Conservation  
Comment Letter #23: William Bryant, Program Manager, Active Faults, California  
Department of Conservation, Division of Geology and Mines (also  
see Comment Letter #4)  
Comment Letter #25: Giyora Doeh  
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### **List of Acronyms**

BOE	City of Los Angeles, Department of Public Works, Bureau of Engineering
BTEX	benzene, toluene, ethyl-benzene, and xylene
CDM	Camp Dresser & McKee, Inc
CFD4	Community Facilities District No. 4, Playa Vista Development Project
CLA	City of Los Angeles, Office of the Chief Legislative Analyst
DTSC	State of California Environmental Protection Agency Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ETI	Exploration Technologies, Inc
HRA	Health Risk Assessment
H <sub>2</sub> S	hydrogen sulfide
LADBS	City of Los Angeles, Department of Building and Safety
LARWQCB	California Regional Water Quality Control Board, Los Angeles Region
OARS	City of Los Angeles, Office of Administrative Research Services
OEHHA	California Office of Environmental Health Hazard Assessment
ppmv	parts per million of volume
TAC	toxic air contaminant

### **List of Consultants and Contracting Agency**

<u>Consultant</u>	<u>Contracting Agency</u>
Camp Dresser & McKee, Inc	Playa Vista Capital
Davis and Namson Consulting Geologists	Playa Vista Capital
Earth Consultants International	Playa Vista Capital
Exploration Technologies, Inc	City of Los Angeles
Geomatrix Consultant Inc	Playa Vista Capital
Integrated Environmental Services, Inc	Playa Vista Capital
Kleinfelder	City of Los Angeles
Sepich Associates Methane Specialists	Playa Vista Capital
Zymax Forensics	Playa Vista Capital

### **Lists of Reviewing State Agencies**

California Department of Conservation

California Department of Conservation, Division of Geology and Mines

California Office of Environmental Health Hazard Assessment (OEHHA)

California Regional Water Quality Control Board, Los Angeles Region (LARWQCB)

## **EXECUTIVE SUMMARY**

### **Study Purpose**

This report has been prepared in response to the direction of City Council to the Office of the Chief Legislative Analyst (CLA) to provide information to the Planning and Land Use Management Committee and the City Council relative to a variety of potential risk factors at the Playa Vista Development site, so that Council can decide whether the City should provide Mello-Roos financing for some of the infrastructure and ecological components of the Playa Vista Development Project.

### **Community Facilities District No. 4 Playa Vista Development Project Description**

Community Facilities District No. 4 (CFD4) is a portion of the master planned community known as Playa Vista (Playa Vista Development Project). The Playa Vista Development Project has an approximate area of 1,087 gross acres and is over three miles long and one mile wide. It is located on the west side of the City, approximately 11 miles west of downtown, four miles south of the City of Santa Monica and three miles north of Los Angeles International Airport (LAX). The overall Playa Vista Development Project includes residential units, office space, retail, media and technology facilities, community serving facilities (i.e. school, day-care, etc.), wetland and habitat restoration, open space and recreational areas, and infrastructure.

CFD4 is a portion of Phase I of the Playa Vista Development Project. CFD4 is located immediately east of Lincoln Boulevard on both sides of Jefferson Boulevard and consists of approximately 169 gross acres, of which 79.4 acres are expected to be subject to the proposed Mello-Roos Special Tax. The Developer's plans call for development of dwelling units, retail and commercial facilities, library, school, other community-serving facilities, open-space, habitat improvements/enhancements, and infrastructure development and improvements.

### **Background and Process**

On June 6, 2000, the Budget and Finance Committee conducted a public hearing on the proposed issuance of Mello-Roos bonds for CFD4. During the hearing, several questions were raised which the Committee determined required further analysis. The Committee instructed the CLA to supervise the analysis and authorized the CLA to convene a working group of City departments and other agencies as necessary and contract with outside consultants to conduct the analysis. These instructions included holding a public hearing to obtain input from the public on the scope of the study. Once the analysis was complete, the CLA was instructed to report back to the Planning and Land Use Management Committee and the City Council to resolve the policy issues relative to the safety of the site. Once those policy issues are resolved, the intent is for the Budget and Finance Committee to again consider the issuance of the Mello-Roos bonds.

On June 20, 2000, the Council adopted the Budget and Finance Committee report. The CLA proceeded to convene a working group consisting of the Department of Building and Safety (DBS),

Planning, Department of Public Works Bureau of Engineering (BOE), City Attorney, and the Office of Administrative and Research Services (OARS). The CLA, with the assistance of the working group, developed a draft study scope.

### **Study Scope and Design**

The draft Study Design and Scope, which included investigation of methane, hydrogen sulfide (H<sub>2</sub>S), and air toxics (benzene, toluene, ethyl-benzene, and xylene (BTEX)) was released for public review and comment and a public hearing was held to accept public comments and in-put into the study design on July 18, 2000. In response to public comments received, the study was expanded to include a review of subsidence. Further, technical issues commented on by the public were considered as the study elements were developed and reviewed. During the investigation process, the study scope was further expanded to address risks associated with soil and groundwater contamination.

The Study was completed in three steps. This stepped approach allowed the City to maximize resources and avoid unnecessary duplication of data/information collection.

The City engaged the professional services of Kleinfelder to assist in review of methane data and to perform a health risk assessment for BTEX and H<sub>2</sub>S emissions identified at the CDF4 site. The City requested the assistance of the California Department of Conservation Divisions of Mines and Geology (Division of Mines and Geology) and Oil, Gas, and Geothermal Resources (Division of Oil and Gas) in the review of earthquake fault and methane issues respectively. The City contacted the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) regarding soil and groundwater remediation issues and associated health risks.

The study results were released for a 30 day public comment period. Various City department and state agency reviews were included in the appendices of the Report. Copies of the Report were directly mailed to more than 100 individuals, noticed in *Argonaut* and *Daily Breeze* newspapers, placed on the City's web site, and noticed via availability notices mailed to over 500 addresses. Studies included in the reference Section of the Report were made available for review at nine City locations. Twenty-four comment letters were received. Comment letters and responses to comments are included in Section 6 of this Report.

### **Summary of Findings**

The City, with assistance from consultants in some cases, investigated the potential public health and safety impacts, and appropriate mitigations if any, associated with methane, subsidence, earthquake fault impacts, air toxic (benzene, toluene, ethyl-benzene, and xylene (BTEX)) and hydrogen sulfide emissions, and soil and groundwater contamination in the CFD4 area of the Playa Vista Development Project.

The study addressed five primary questions:

**Is the adjacent Southern California Gas Company Playa Del Rey Gas Storage Facility leaking and, therefore, the source of the methane contamination on the site and a risk to workers and future residents?**

Process - These issues were evaluated by the BOE, LADBS with their "Peer Reviewer," Dr. Jones, President of Exploration Technologies, Inc. (ETI), Kleinfelder, Playa Vista Capital consultants, and the Division of Oil and Gas.

Results - The Southern California Gas Company Playa Del Rey Gas Storage facility is not the source of methane contamination found at the site. Furthermore, there is no evidence which suggests that the gas storage facility is leaking or improperly maintained. There is no evidence that the gas storage facility presents a danger to workers or future residents.

**Is the extent of the methane contamination fully defined and can it be mitigated?**

Process - These issues were evaluated by the BOE, LADBS, ETI, Kleinfelder, Playa Vista Capital consultants, and the Division of Oil and Gas.

Results - Methane is detected at varying concentrations in the soil gas samples collected throughout the Playa Vista Development Project site, with the highest concentrations located in the western portion of the site. The numerous studies of methane concentrations at the Playa Vista Development Project site has yielded a data set that is more than adequate for the assessment of potential methane hazards and for the design of appropriate mitigation measures.

A methane mitigation system to prevent, detect, and monitor the presence of methane will be required for all structures built on the site. Mitigation measures will vary depending upon the concentration of methane present, with mitigations required for areas of higher methane concentrations being inclusive of all mitigations required for areas with lesser methane concentrations. Table 2 -1 in Section 2 of this report lists all mitigation requirements and methane concentration categories. These mitigation measures are adequate for the Playa Vista Development site.

**Is there significant subsidence on the site currently, or will future methane mitigation measures cause subsidence issues which may undermine the structural integrity of the future development?**

Process - This issue was first analyzed in the Draft Environmental Impact Report, First Phase for Playa Vista. The BOE conducted further surveys of the Playa Vista Development Project vicinity.

Results - No significant or clearly defined trend of increased subsidence within the Playa Del Rey Oil Field or any other specific area was observed in the vicinity of the Playa Vista Development Project site. Settlement, in the range of 2.66 inches over a 25 year period, is localized and appears to be associated with curb, sidewalk, and gutter settlement along major streets.

Design measures are adequate to address the minimal level of subsidence and uplift observed in the area. There is no evidence that proposed methane mitigation measures would result in increased potential for subsidence in the area.

**Is there an active earthquake fault at the site which presents an unacceptable risk to workers and future residents?**

Process - These issues were evaluated by several Playa Vista Capital consultants, BOE, LADBS, ETI, Playa Vista Capital consultants, and the Division of Mines and Geology.

Results - The geologic and geophysical data do not support the existence of the postulated Lincoln Boulevard fault. In addition, as indicated above, methane gas at the Playa Vista Development Project site does not come from the Southern California Gas Company Playa Del Rey Gas Storage Field. Therefore, the potential for large volumes of methane gas to escape from the Southern California Gas Company Playa Del Rey Gas Storage Field in the event of an earthquake is unsupported by the evidence.

Off-shore seismic data in the area of the entrance of Marina Del Rey identified two anomalies that could or could not be off-shore faults. The Division of Mines and Geology reviewed the data and information available regarding these anomalies and indicates that there are several plausible explanations for the anomalies. (Section 7, Letter # 23). It appears that the anomalies could be associated with depositional features characteristic of stream channels.

**Is there BTEX and H<sub>2</sub>S contamination along with the methane which presents a health risk to workers and future residents?**

Process - These issues were evaluated by Kleinfelder, CLA, and BOE. Potential cumulative impacts associated with soil and groundwater contamination have been addressed by the Regional Water Quality Control Board, Los Angeles Region (LARWQCB), in coordination with the California Office of Environmental Health Hazard Assessment (OEHHA).

Results - Potential health risks associated with BTEX and H<sub>2</sub>S soil gas emissions at the Playa Vista Development Project site, whether associated with methane or soil and groundwater contamination, are below the benchmarks established by the regulatory agencies to indicate insignificant risk, with no further investigation or remediation warranted.

With regard to soil and groundwater contaminants, the LARWQCB, in coordination with OEHHA, has established a soil and groundwater remediation process which adequately protects human health and the environment, including addressing potential cumulative impacts. The health based remediation strategy established for the Playa Vista Development Project site is comprehensive in nature and will consider BTEX soil gases in the cumulative assessment completed for the site as remediation activities are completed. The LADBS has established procedures to ensure close coordination between the City and the LARWQCB as site development progresses. Therefore, potential cumulative impacts associated soil and groundwater contamination, including BTEX, will be addressed in a manner that is protective of human health.



## **SECTION 1**

### **INTRODUCTION**

#### **1.0 Study Purpose**

This report has been prepared in response to the direction of City Council to the Office of the Chief Legislative Analyst (CLA) to provide information to the Planning and Land Use Management Committee and the City Council relative to a variety of potential risk factors at the Playa Vista Development site, so that Council can decide whether the City should provide Mello-Roos financing for some of the infrastructure and ecological components of the Playa Vista Development Project.

#### **1.1 Community Facilities District No. 4 Playa Vista Development Project Description**

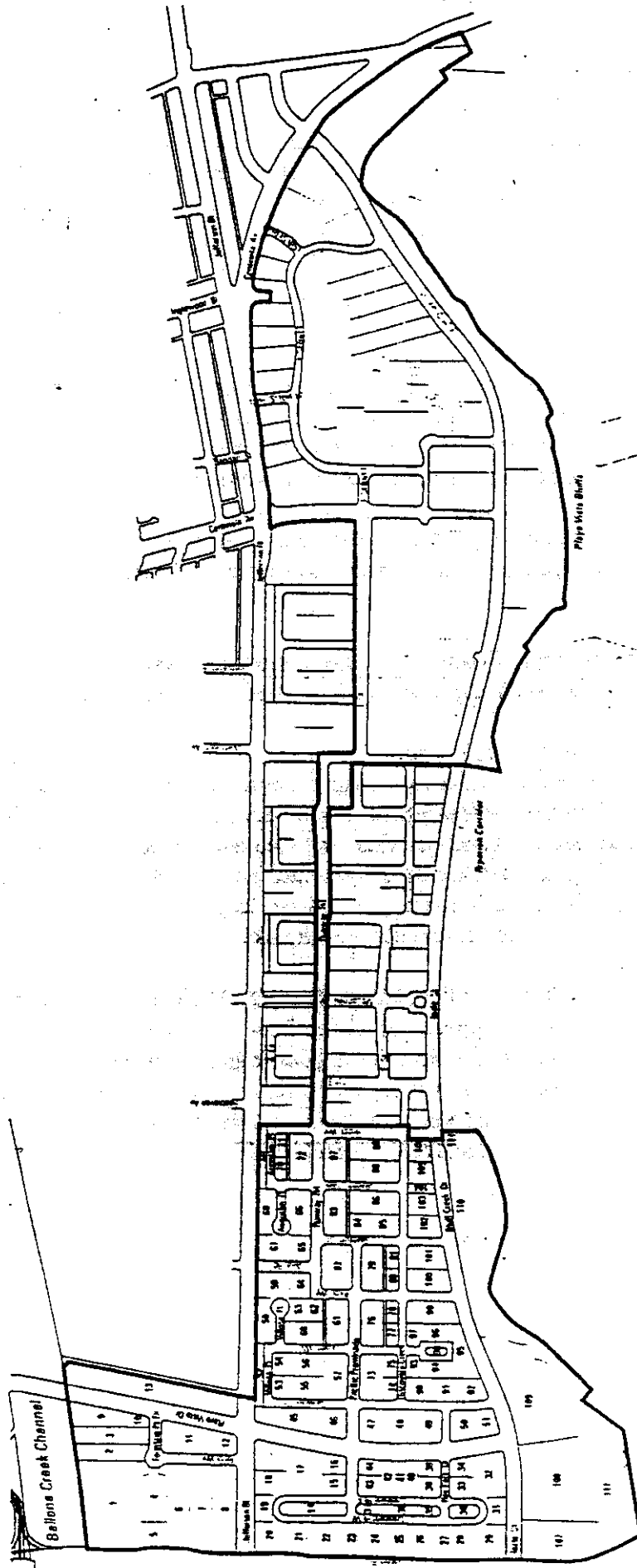
Community Facilities District No. 4 (CFD4) is a portion of the master planned community known as Playa Vista (Playa Vista Development Project). The Playa Vista Development Project has an approximate area of 1,087 gross acres and is over three miles long and one mile wide. It is located on the west side of the City, approximately 11 miles west of downtown, four miles south of the City of Santa Monica and three miles north of Los Angeles International Airport (LAX). The overall Playa Vista Development Project includes residential units, office space, retail, media and technology facilities, community serving facilities (i.e. school, day-care, etc.), wetland and habitat restoration, open space and recreational areas, and infrastructure.

CFD4 is a portion of Phase I of the Playa Vista Development Project. CFD4 is located immediately east of Lincoln Boulevard on both sides of Jefferson Boulevard and consists of approximately 169 gross acres, of which 79.4 acres are expected to be subject to the proposed Mello-Roos Special Tax. The Developer's plans call for development of dwelling units, retail and commercial facilities, library, school, other community-serving facilities, open-space, habitat improvements/enhancements, and infrastructure development and improvements. Figure 1-1 illustrates the boundaries of CFD4 and the Playa Vista Phase I Development Project area.

#### **1.2 Background and Process**

On June 6, 2000, the Budget and Finance Committee conducted a public hearing on the proposed issuance of Mello-Roos bonds for CFD4. During the hearing, several questions were raised which the Committee determined required further analysis. The Committee instructed the CLA to supervise the analysis and authorized the CLA to convene a working group of City departments and other agencies as necessary and contract with outside consultants to conduct the analysis. These instructions included holding a public hearing to obtain input from the public on the scope of the study. Once the analysis was complete, the CLA was instructed to report back to the Planning and Land Use Management Committee and the City Council to resolve the policy issues relative to the safety of the site. Once those policy issues are resolved, the intent is for the Budget and Finance Committee to again consider the issuance of the Mello-Roos bonds.

**FIGURE 1.1**



Community Facility District (CFD) 4

Phase 1 Development Area

**Playa Vista** Los Angeles, California

Prepared by City of Los Angeles Planning Department • Planning Services Section • July 2000

Not to Scale

On June 20, 2000, the Council adopted the Budget and Finance Committee report. The CLA proceeded to convene a working group consisting of the Department of Building and Safety (LADBS), Planning, Department of Public Works Bureau of Engineering (BOE), City Attorney, and the Office of Administrative and Research Services (OARS). The CLA, with the assistance of the working group, developed a draft study scope.

### 1.3 Study Scope and Design

The draft Study Design and Scope, which included investigation of methane, hydrogen sulfide (H<sub>2</sub>S), and air toxics (benzene, toluene, ethyl-benzene, and xylene (BTEX)) was released for public review and comment and a public hearing was held to accept public comments and in-put into the study design on July 18, 2000. In response to public comments received, the study was expanded to include a review of subsidence. Further, technical issues commented on by the public were considered as the study elements were developed and reviewed. During the investigation process, the study scope was further expanded to address risks associated with soil and groundwater contamination.

The Study was completed in three steps (Figure 1-2). This stepped approach allowed the City to maximize resources and avoid unnecessary duplication of data/information collection.

The City engaged the professional services of Kleinfelder to assist in review of methane data and to perform a health risk assessment for BTEX and H<sub>2</sub>S emissions identified at the CDF4 site. The City requested the assistance of the California Department of Conservation Divisions of Mines and Geology (Division of Mines and Geology) and Oil, Gas, and Geothermal Resources (Division of Oil and Gas) in the review of earthquake fault and methane issues respectively. The City contacted the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) regarding soil and groundwater remediation issues and associated health risks.

The study results were released for a 30 day public comment period. Various City department and state agency reviews were included in the appendices of the Report. Copies of the Report were directly mailed to more than 100 individuals, noticed in *Argonaut* and *Daily Breeze* newspapers, placed on the City's web site, and noticed via availability notices mailed to over 500 addresses. Studies included in the reference Section of the Report were made available for review at nine City locations. Twenty-two comment letters were received. Comment letters and responses to comments are included in Section 6 of this Report.

**Figure 1-2**

## **STEPPED STUDY DESIGN**

### **Step I - Issues Investigation**

Step I in each of the four issue areas (methane, subsidence, potential fault impacts, health risk assessment for BTEX and H<sub>2</sub>S) consisted of a review of existing studies and information and/or studies recently completed. Independent review of data and information and resolution of issues involved City staff review, responsible regulatory agencies, and consultants as appropriate. Regulatory and responsible regional and state agency review was sought as appropriate. Consultants with expertise in the areas of concern, and not found within the City, were hired.

If an area of concern was resolved through the Step I investigation and no impacts were identified, that issue was closed and no further work regarding that issue was undertaken. If, through the Step I investigation, impacts were identified and adequately characterized, that issue was addressed through Step III - Identification of Mitigations. If the Step I investigation resulted in the identification of data/information gaps essential to resolving issues or to better characterize impacts to allow for mitigation development, additional information was obtained through Step II - Additional Data/Information Gathering.

### **Step II - Additional Data/Information Gathering**

If the Step I investigation identified data gaps essential to resolving issues or the need to better characterize impacts to allow for mitigation development, such information and data was collected through Step II. In some instances, additional data and site investigation work required consultants with the expertise and certification in the appropriate field.

If an area of concern was resolved through the additional/information obtained through the Step II investigation and no impacts were identified, that issue was closed and no further work regarding that issue was undertaken. If, through the Step II investigation, impacts were identified and characterized, that issue was addressed through Step III - Identification of Mitigations.

### **Step III - Mitigation Development**

For all substantial impacts identified through Step I and II investigations, mitigations were investigated, evaluated, and recommended for implementation.

## **SECTION 2**

### **METHANE**

#### **2.0 General Background**

Methane gas is a colorless, odorless gas which is combustible.

At the direction of LADBS and with the concurrence of Playa Vista Capital, in spring/summer 1999, Exploration Technologies, Inc. (ETI) designed and supervised the collection and analysis of gas vapor surveys at the Playa Vista Development Project site to better document and understand the subsurface methane gas levels in the project area. The ETI report, dated April 17, 2000, summarizing the results of that effort and identifies areas of methane concentrations of concern in the CFD4 area.

The CLA authorized the hiring of Kleinfelder to provide additional independent review of existing methane data and proposed mitigations.

#### **2.1 Review of Existing Information/Studies**

##### **2.1.1 Source of Methane**

##### **Exploration Technologies, Inc.**

ETI postulated that the methane gas detected at CDF4 site could be the result of methane gas seepage from the Southern California Gas Company Playa Del Rey Gas Storage Field via the postulated Lincoln Boulevard Fault plane (April 17, 2000).

##### **2.1.2 Methane Levels and Mitigation**

##### **General**

Several different studies have detected methane at varying concentrations in the soil gas samples collected throughout the Playa Vista Development Project site, with the highest concentrations located in the western portion of the site.

## 2.2 Additional Data/Information Gathering

### 2.2.1 Source of Methane

#### Camp Dresser & McKee Inc. (CDM) and Zymax Forensics

Camp Dresser & McKee Inc. (CDM) and Zymax Forensics undertook studies to determine the composition of the Southern California Gas Company Playa Del Rey Gas Storage Field gas and soil gas samples taken at the Playa Vista Development Project site (Camp Dresser and McKee Inc., September 5, 2000; Zymax Forensics, September 21, 2000). The composition of the storage facility gas was then compared to the soil gas samples from the development site. Dr. Ian Kaplan of Zymax Forensics concluded that the data showed that the chemical and isotopic characteristics of the natural gas stored by the Southern California Gas Company Playa Del Rey Gas Storage Field are different from the gas detected at the Playa Vista Development Project site.

#### California Department of Conservation Division of Oil and Gas

The Division of Oil and Gas is, among other things, responsible for regulating and overseeing the development, operation, and abandonment of gas storage facilities and oil wells. The Division of Oil and Gas indicates that the most recent testing at Playa Del Rey Gas Storage Field, which took place in December 1998 and April 2000, and the regular annual reviews indicate that no gas losses are occurring within the Field. The Division of Oil and Gas further indicates that upon review of information and studies, including information provided by ETL, Southern California Gas Company, and the Playa Vista Development Project, that they have no information to indicate that any gas at the Playa Vista Development Project site is from the Southern California Playa Del Rey Gas Storage Field.

The Division of Oil and Gas further indicated that they will require the Playa Vista Development Project proponent to replug any wells present in the project area to present-day standards. Any unrecorded wells identified during development will be required to be abandoned and plugged to present-day standards. Finally, the Division will recommend that all wells be vented if a structure is to be placed over or in proximity of a well (Division of Oil and Gas, October 10, 2000 (Appendix A)).

#### Kleinfelder

Kleinfelder reviewed several documents and reports regarding methane samples collected at the Playa Vista Development Project site (Kleinfelder, February 7, 2000 (b)). Kleinfelder indicates that the origin of methane detected in soil gas and groundwater at the Playa Vista Development Project site appears to be related primarily to a deep thermogenic source and is not associated with the Southern California Playa Del Rey Gas Storage Field. Kleinfelder further indicates that several methane samples collected appear to indicate there may be secondary shallow source areas comprised of decaying biological material.

## **2.2.2 Methane Levels and Mitigation**

### **General**

Methane is detected at varying concentrations in the soil gas samples collected throughout the Playa Vista Development Project site, with the highest concentrations located in the western portion of the site (Figure 2.1) (Kleinfelder, February 7, 2001 (b); LADBS, February 28, 2001 (Appendix B); Sepich Associates Methane Specialists, January 30, 2001). The volume of study of methane concentrations at the Playa Vista Development Project site has yielded a data set that is more than adequate for the assessment of potential methane hazards and for the design of appropriate mitigation measures (Kleinfelder, February 10, 2001 (b); Sepich Associates Methane Specialists, January 30, 2001).

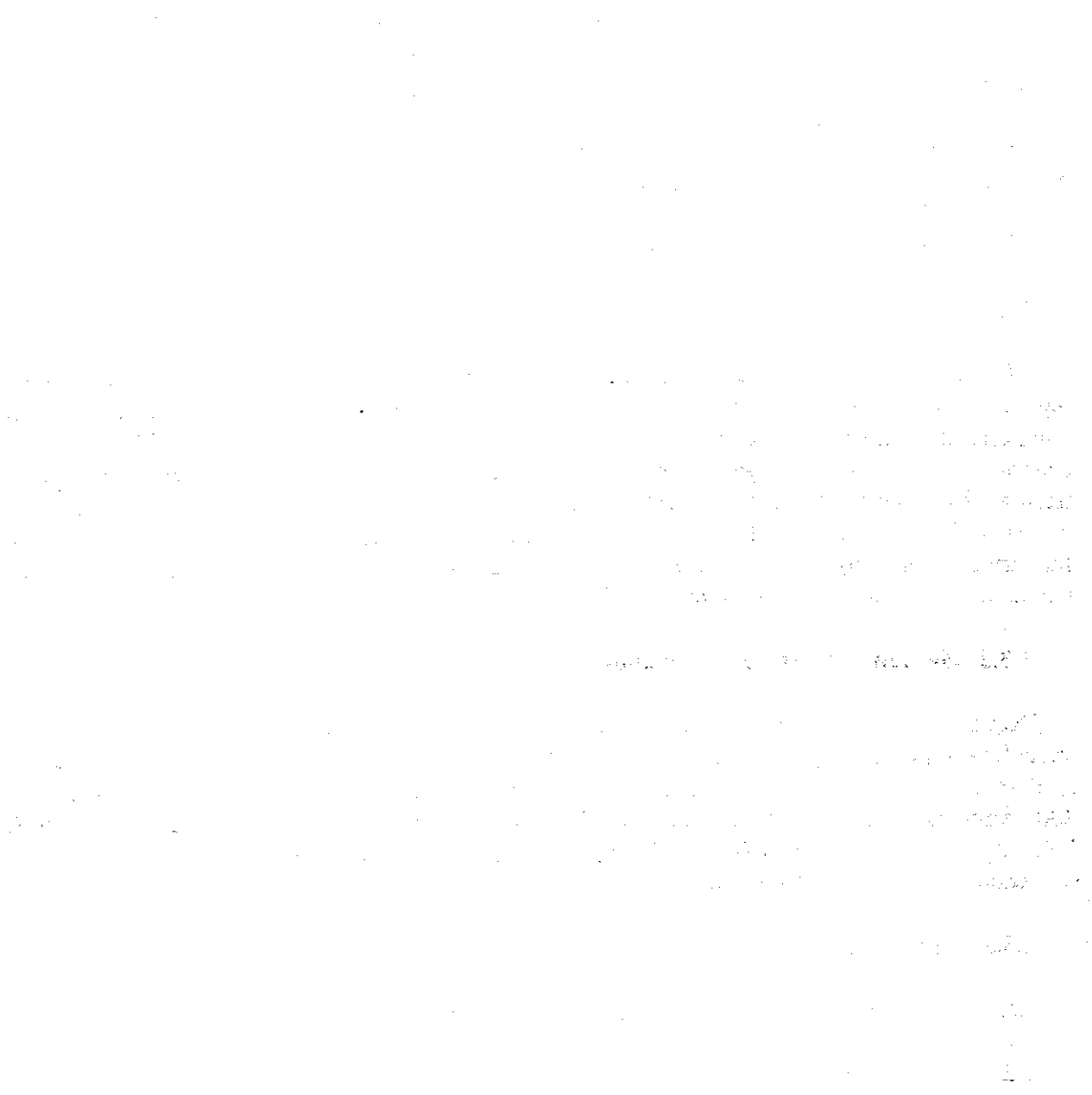
### **Kleinfelder**

Kleinfelder concludes that methane mitigation systems are required for the Playa Vista Development Project site (Kleinfelder, February 7, 2001 (b)). Kleinfelder indicates that methane mitigations: 1) consistent with specification provided by the LADBS in the Los Angeles Building Code and in Memorandum of General Distribution No. 92; 2) consistent with the Division of Oil and Gas recommendations for oil well replugging and abandonment; and 3) consistent with the recommendations of Sepich and Associates 1999 report, would be considered adequate to protect the health and safety of the future residential and commercial occupants of the proposed Playa Vista Development Project. Kleinfelder further indicates that these mitigation measures have been effective in a variety of residential and commercial environments in Southern California, and are adequate for the Playa Vista Development site.

### **Sepich Associates**

Sepich Associates Methane Specialists recommends a methane mitigation system, based upon methane levels present, to prevent, detect, and monitor the presence of methane (Sepich Associates Methane Specialists, January 30, 2001). The Sepich Associates report identifies three different levels of methane concentrations and associated mitigation levels for the project site: Level I, less than 100 parts per million of volume (ppmv); Level II, 100 and 12,500 ppmv, and; Level III above 12,500 ppmv. All three levels would require a basic mitigation prevention system below the building, including a 12-inch gravel blanket, with pipes to ventilate gas from underneath the impermeable membrane, and methane detection alarm systems within the building. For Levels II and III, automatic ventilation systems triggered by elevated methane concentration levels beneath the impermeable membrane and continuous monitoring systems would also be required. Additionally, Level III would require a subsurface venting system consisting of vent pipes drilled into the 50-foot gravel aquifer to extract methane gas, thereby alleviating the accumulation of methane within the aquifer and below the ground surface and also reducing the surface emissions of methane.

**Figure 2.1: Playa Vista, Los Angeles, California Development Methane Concentrations (ppmv)**





### Camp Dresser & McKee Inc. (CDM)

CDM implemented a pilot program for the subsurface methane venting system. More than 70 temporary vent wells were installed at the site to detect the feasibility and effectiveness of venting subsurface accumulations of methane in Level III mitigation areas. The program illustrated that subsurface methane can be vented. A permanent subsurface venting system is currently in progressive design that will establish criteria for determining the exact number, appropriate location, and engineering design of the subsurface wells (LADBS, February 28, 2001 (Appendix B)).

## **2.3 City Review, Conclusions, and Mitigations**

### **2.3.1 Methane Source**

LADBS, and their "Peer Reviewer," Dr. Jones, President of ETI, reviewed information and studies regarding the Southern California Gas Company Playa Del Rey Gas Storage Field and geochemical components of methane collected at the Playa Vista Development Project site. LADBS and ETI concluded that the gas seepage on the Playa Vista Development Project site appears to be derived from the Pico Sands at depth and does not come from the California Playa Del Rey Gas Storage Field (LADBS, February 28, 2001) (Appendix B); LADBS, January 31, 2001 (a) (Appendix C); ETI, January 31, 2001 (b) (Appendix D)). These findings are consistent with the conclusions of the Division of Oil and Gas, Kleinfelder, and Zymax Forensics.

### **2.3.2 Methane Levels and Mitigation**

LADBS and ETI, reviewed information and studies regarding methane concentrations at the Playa Vista Development Project site and methane mitigations. The LADBS and ETI concluded that the methane mitigation systems recommended by Sepich Associates Methane Specialists, January 30, 2001 would adequately protect public safety (LADBS, January 31, 2001 (a) (Appendix C); LADBS, February 28, 2001 (Appendix B); ETI, January 31, 2001 (a) (Appendix D)). These measures exceed the recommendations of Kleinfelder.

### **2.3.3 Mitigations**

A methane mitigation system to prevent, detect, and monitor the presence of methane will be required. Mitigation measures will vary depending upon the concentration of methane present, with mitigations required for areas of higher methane concentrations being inclusive of all mitigations required for areas with lesser methane concentrations. Table 2 -1 lists all mitigation requirements and methane concentration categories.

Level I mitigations will be required for areas with methane concentrations of less than 100 parts per million of volume (ppmv). Level I mitigations will include a basic mitigation prevention system below buildings, including a 12-inch gravel blanket with pipes to ventilate gas from underneath an impermeable membrane and membrane detection alarm systems within the building.

Level II mitigations will be required for areas with methane concentration levels between 100 and 12,500 ppmv. Level II mitigations will include all Level I mitigations, plus a requirement to install automatic ventilation systems triggered by elevated methane concentrations levels beneath the impermeable membrane and continuous monitoring systems.

Level III mitigations will be required for areas with methane concentrations levels above 12,500 ppmv. Level III mitigations will include all Level I and Level II mitigations, plus a requirement to install a subsurface venting system.

Utility vaults and similar substructures installed in the Playa Vista Development area will be required to implement appropriate mitigations necessary to prevent accumulation of methane in the structures. This could include but is not limited to, installation of impermeable membranes under the structures, venting of structures, installation of methane sensors and alarms, and other recommendations identified by methane specialists.

The developer/builder will have primary responsibility for the design and construction of building the methane prevention and building monitoring systems, and for ensuring appropriate operation. Upon certification of operational status of the building methane and monitoring systems, the building owner or property owners' association will have responsibility for the continued operation, testing, maintenance, repair, and replacements of the systems, as necessary.

The building owner or property owners' association shall test the system at least annually and submit a certification to the Los Angeles Fire Department and the LADBS that annual testing, maintenance, and service has been completed and certifying that all systems are operational. The building owner or property owners' association shall develop and submit for approval by the LADBS and the Los Angeles Fire Department an evacuation plan for the building. A copy of the evacuation plan shall be made available to residents and tenants. The building owner or property owners' association shall have financial responsibility for all costs and expenses associated with the building methane system and the monitoring system and for submitting required reports to be provided to the City.

For buildings that are located on common areas (i.e. not owned or controlled by an individual building owner or property owners' association), the Playa Vista Master Association shall have responsibility for testing, maintenance, repair, service, and reporting.

An individual or group should be engaged to monitor and oversee implementation of methane mitigations in all development, including infrastructure installed by various entities. This oversight should include authority to review design, installation, and initial operation of the required methane mitigation measures. The monitoring entity should report to the Planning Department.

**Table 2-1: Methane Mitigations**

**METHANE SYSTEM REQUIREMENTS**

A baseline soil gas survey shall be conducted for each building site to determine the areas of Playa Vista Phase I in which building methane prevention systems are required.<sup>1</sup>

Mitigation Measure	Methane Concentration Level		
	Level I <sup>2</sup>	Level II <sup>2</sup>	Level III <sup>2</sup>
	White: <10ppmv Blue: 10-<30ppmv Lt. Blue: 30-<100ppmv	Green: 100-<1000ppmv Yellow: 1000-<12,500ppmv	Orange: 12,500-<150,000ppmv Red: 150,000ppmv or >
<b>Methane Prevention System<sup>3</sup></b>			
Passive - Underneath the Building			
• 12" gravel blanket	Required	Required	Required
• gas collection vent pipe	Required	Required	Required
• impermeable membrane	Required	Required	Required
Active - Mechanical Ventilation			
• ventilation triggered with elevated methane concentrations	None	Required <sup>4</sup>	Required <sup>4</sup>
Subsurface Ventilation	None	None	Required
<b>Methane Detection System</b>			
Within the Building			
• detectors in spaces located in the basement/lowest level in the building <sup>5</sup>	Required	Required	Required
• audible alarm <sup>6</sup>	Required	Required	Required
• visual alarm <sup>6</sup>	Required	Required	Required
• automatic notification of LAFD <sup>6</sup>	Required	Required	Required
Underneath the Building			
• data collecting sensors below impermeable membrane <sup>5</sup>	None	Required	Required
• data collecting sensors between impermeable membrane and lowest floor/basement slab <sup>5</sup>	Required	Required	Required
<b>Methane Monitoring System</b>			
• manual quarterly assessment	Required <sup>7</sup>	None	None
• continuous methane sampling and data collection accessible by the homeowners' association, LADBS and LAFD via the Internet	None	Required <sup>8</sup>	Required <sup>8</sup>
<b>Maintenance of the Prevention, Detection and Monitoring Systems</b>			
• annual testing to the satisfaction of LADBS and LAFD	Required	Required	Required
• homeowners' association to have financial responsibilities	Required	Required	Required

**Table 2-1 cont.: Methane Mitigations**

**BUILDING SOIL GAS SURVEY**

Page 2

Contingency Plan			
when high methane concentration are detected within a building	Required	Required	Required
when methane system components fail	Required	Required	Required

**Footnotes:**

1. Projects for which building permit applications were received by LADBS prior to January 1, 2002 may use as baseline methane concentration data the soil gas survey data prepared by CDM/ETI at Appendix 1. After January 1, 2002, all projects shall submit for approval to the satisfaction of LADBS, individual soil gas site assessments that characterize methane soil gas concentrations for the building site.
2. Levels of methane concentrations and corresponding colors on the methane concentration maps are identified in the Appendix 2 or individual building site soil gas assessments.
3. LADBS may reduce on requirements in areas where the methane concentrations in the area of building sites is non-detect.
4. When methane concentrations are detected at 37,500 ppmv by the sensors in the ventilation system below the impervious membrane, a mechanical ventilation system shall be automatically activated.
5. Number, type and location of detectors (or approved equivalents) to be determined by a qualified methane engineer, as approved by LADBS.
6. Audible alarm, visual alarm and notification of LAFD shall be triggered when methane concentrations are detected at 12,500 ppmv.
7. Sampling data reviewed by a qualified methane engineer shall be approved by LADBS. When such data is determined to be highly variable, additional manual sampling or electronic sampling may be required by LADBS. A qualified methane engineer shall submit a report to LADBS with conclusions and recommendations.
8. When the methane concentration data indicates significant changes in methane concentrations below the membrane, then a report by a qualified methane engineer shall be submitted to LADBS characterizing the reasons for such changes.

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Copied from the Sepich Associates Report. January 30, 2001

## SECTION 3

### SUBSIDENCE

#### 3.0 General Background

Subsidence is the sinking of the ground to a lower level. Subsidence can be associated with sediment consolidation, groundwater withdrawal, and gas and oil production. Removal of fluids from underground reservoirs or aquifers can create voids that may result in eventual ground surface subsidence. Some have indicated that escaping gases, such as methane, could also result in subsidence. Ground subsidence can result in differential settlement and cause damage to engineered structures.

#### 3.1 Review of Existing Information/Studies

Subsidence has been documented in several oil fields in the southern California region. However, the Playa Vista development site is not located in an area of known subsidence (City of Los Angeles, Draft Environmental Impact Report, First Phase for Playa Vista, September 28, 1992, State Clearinghouse No. 90010510).

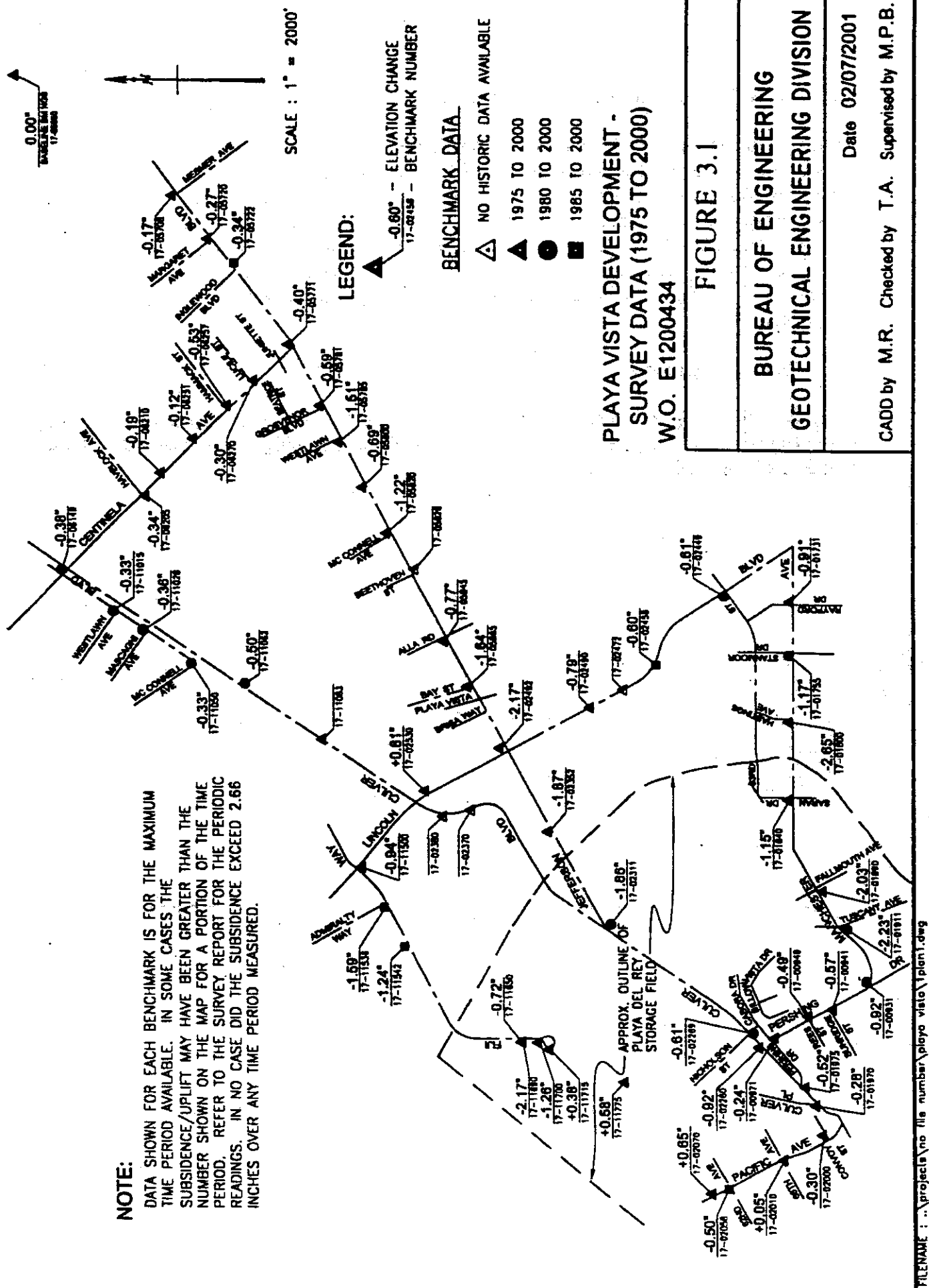
Development of the Playa Del Rey Oil Field in the vicinity of the Playa Vista development site began in the 1920's with production peaking in 1935. Only minor subsidence was noted in the Playa Del Rey Oil field between the primary production years of 1925 to 1938, with no subsidence noted between 1949 and 1955. Oil extraction at the present time is minimal, and the former oil reservoir is pressurized for natural gas storage.

#### 3.2 Additional Data/Information Gathering

##### Bureau of Engineering (BOE) Survey Division

To evaluate subsidence in the Playa Vista Development Project area, the BOE, Survey Division performed a survey of the area in October, 2000 (BOE, October 24, 2000 (Appendix E)). Using a National Geodetic Survey benchmark as a baseline, the survey recorded the current elevations of benchmarks in the vicinity of the Playa Vista Development Project area and compared them to those same benchmarks as surveyed in 1975, 1980, and 1985. The survey met the tolerances for National Geodetic Survey, Second Order Class II, resulting in a high degree of accuracy.

The elevation change measured in the area over the 25 year period from 1975 to 2000 ranged from -2.66 inches (subsidence) to +0.81 inches (uplift). Figure 3.1 illustrates the location of each benchmark surveyed, the elevation change from the earliest available date, and the approximate limits of the oil field.



### **3.3 City Review, Conclusions, and Mitigations**

The maximum subsidence observed by the BOE in the area over the period from 1975 to 2000 was 2.66 inches. This level of subsidence was confined to the location at an elevation marker placed on the curb of Manchester Boulevard at the intersection of Hastings Avenue. Another elevation marker displaying greater than 2 inches of settlement (2.17 inches) was located in a Lincoln Boulevard sidewalk. No significant or clearly defined trend of increased subsidence with the Playa Del Rey Oil Field or any other specific area was observed. This suggests that settlement is localized and may be associated with curb, sidewalk, and gutter settlement along major streets (BOE, February 26, 2001 (Appendix F)).

#### **3.3.1 Mitigations**

None required. Design measures are adequate to address the minimal level of subsidence and uplift observed in the area. There is no evidence that proposed methane mitigation measures would result in increased potential for subsidence in the area.

## **SECTION 4**

### **POTENTIAL FAULT IMPACTS ON THE PLAYA DEL REY GAS STORAGE FACILITY**

#### **4.0 General Background**

The ETI report (ETI, April 17, 2000) identified the possibility of a potential subsurface fault (called the Lincoln Boulevard Fault in the report). Concern was expressed that if such a fault does exist, a future earthquake with an epicenter close to the CFD4 site could potentially cause a rapid release of large volumes of gas from the Playa Del Rey Gas Storage Facility to the surface along the purported Lincoln Boulevard Fault plane.

#### **4.1 Review of Existing Information/Studies**

##### **Exploration Technologies, Inc. (ETI)**

The ETI report postulated a previously undiscovered fault with a shallow subsurface location just east of Lincoln Boulevard. ETI mapped a shallow oval-shaped methane anomaly just east of Lincoln Boulevard, as detected by a four foot soil gas survey and monitoring wells. ETI interpreted the anomaly to be a result of a postulated earthquake fault. ETI further postulated that the fault should be considered potentially active and that an earthquake event along the fault could result in large volumes of methane gas being released to the surface. ETI also postulated that the methane gas detected at CDF4 site could be the result of methane gas seepage from the Southern California Gas Company Playa Del Rey Gas Storage Field via the postulated Lincoln Boulevard Fault plane.

#### **4.2 Additional Data/Information Gathering**

##### **Davis and Namson**

Subsequent to the ETI April 17, 2000 report, Davis and Namson Consulting Geologists were engaged by Playa Vista Capital to evaluate the faulting issues at the Playa Vista Development Project site. Davis and Namson Consulting Geologists utilized five different geological and geophysical methods to evaluate the possibility of faulting at the Playa Vista Development Project site: 1) search of existing literature; 2) construction of subsurface maps and cross sections based on well data; 3) purchase and interpretation of preexisting Chevron seismic reflection data; 4) acquisition and interpretation of a 2-D high resolution reflection seismic line along Jefferson Boulevard and a 3-D seismic survey over the entire project site, and 5) an off-shore geophysical survey southwest of the site (Davis and Namson Consulting Geologists, November 16, 2000).

Davis and Namson reviewed existing geologic literature and unpublished consultant reports relevant to the Playa Vista Development Project area. Davis and Namson found no mention of the postulated Lincoln Boulevard fault in the literature prior to the ETI report (ETI, 2000). In addition, Davis and Namson conclude that the preexisting evidence cited by ETI to support the existence of the Lincoln



Boulevard fault does not support the presence of such a fault.

A study completed in 1935 by L.H. Metzner is cited by ETI to support the existence of the postulated Lincoln Boulevard fault. Davis and Namson's review of the Metzner report found that Metzner, on the basis of changes in topographic expression, inferred several faults in the Del Rey Hills southwest of the Playa Vista Development Project. However, Davis and Namson indicate that Metzner never claimed that there was a fault in the area of the postulated Lincoln Boulevard fault. Furthermore, Davis and Namson found that the result of oil exploration drilling and geophysical work subsequent to Metzner's work cast doubt on the validity of any of the surface faults postulated in the 1935 Metzner report. Finally, Davis and Namson report that none of the subsurface maps within the Division of Oil and Gas Summary reports completed subsequent to the 1935 Metzner report show Metzner's postulated surface faults.

Davis and Namson, and Jack West a California registered geologist, constructed subsurface maps and cross sections of the Playa Vista Development site using oil and gas well data and previous subsurface work. The group concluded that the two regional cross-sections constructed by Jack West and the three subsurface maps and four-cross sections constructed by Davis and Namson showed no significant fault is possible under the entire Playa Vista Development Project site. Davis and Namson further indicate that no faulting has occurred in the western part of the Playa Vista Development Project site during the last 2.5 to 3.0 million years.

Playa Vista Capital purchased a licensed seismic reflection line, located about 9,000 to 12,000 feet south of the Playa Vista Development site and oriented in an east-west direction, from Chevron. The seismic line is oriented so that it should intersect the southern projection of the postulated Lincoln Boulevard fault. Davis and Namson concluded that due to the unbroken reflectors in the Chevron seismic line and the lack of diffractions that either the postulated Lincoln Boulevard fault is nonexistent or dies out before reaching the line. Further, Davis and Namson state that the Chevron seismic line indicates no faulting has occurred in the last 3.0 million years.

An extensive seismic reflection study was completed under the direction of Davis and Namson. New on- and off-shore geophysical data, mostly seismic reflection, was acquired in a pattern that would image any faulting at the Playa Vista Development Project site. In July, 2000, Subsurface Exploration Company acquired a 2-D high resolution seismic line along the south side of Jefferson Boulevard, with subsequent data processing by Tricon Geophysical and interpretation and integration of the 2-D line with oil well data completed by Davis and Namson. The 2-D line transects most of the Playa Vista Development Project site in an east-west direction from the eastern edge of the Southern California Gas Company Playa Del Rey Gas Storage Field to the eastern end of the Playa Vista property. Davis and Namson state that the 2-D line shows a set of continuous reflectors along the entire line indicating there has been no faulting of any kind along the line during at least the last 1.0 million years. In addition, Davis and Namson conclude that the 2-D seismic line shows no evidence for either the postulated Lincoln Boulevard or Charnock faults in the Playa Vista Development Project site.

A 3-D seismic survey was acquired over the entire Playa Vista Development Project site (except a small area on the west end of the project site for which abundant well data illustrated no faulting during the last 2.5 to 3 million years) and over additional areas along Centinela and Ballona Creeks, Dockweiler State Beach south of Ballona Creek, and in the entrance to Marina Del Rey Harbor. Davis and Namson state that the 3-D seismic survey indicates that no faulting has occurred under the Playa Vista site during the last 2.0 million years. Further, Davis and Namson conclude that the 3-D seismic survey revealed no evidence for either the postulated Lincoln Boulevard or Charnock faults.

During July 2000 an extensive offshore geophysical survey was undertaken by Dr. Dan Francis of California State University Long Beach and Dr. Marc Legg of Legg Geophysical to better understand the origin of the bluffs just south of the Playa Vista Development site. Davis and Namson indicated that the study results show that the bluffs are the result of erosion by the ancestral Ballona Creek and not faulting and uplift.

Two east-west trending faults, with a vertical separation of 12 feet or less, were imaged near the entrance of Marina Del Rey. Davis and Namson concluded that these faults do not project on-shore.

In summary, based upon review of existing literature and extensive new seismic surveys, Davis and Namson (Davis and Namson Consulting Geologists, November 16, 2000) conclude there is no evidence to support the presence of the postulated Lincoln Boulevard or Charnock faults. Furthermore, they conclude that seismic reflection surveys show no faulting has occurred at the Playa Vista Development Project site in at least the last 2.0 million years.

#### Earth Consultants International, Inc.

Earth Consultants International, Inc. reviewed previously published geologic maps and reports covering the Playa Vista Development Project area and unpublished geologic and geotechnical reports pertinent to the Playa Vista site (Earth Consultants International, Inc., July, 2000). Earth Consultants International, Inc. also conducted a subsurface study of borings and Cone Penetrometer Tests across the location of the postulated Lincoln Boulevard fault. Earth Consultants International, Inc. did not find any evidence to support the existence of the postulated Lincoln Boulevard fault across the Playa Vista property.

#### California Department of Conservation, Division of Mines and Geology

The City requested the assistance of the California Department of Conservation, Division Mines and Geology in reviewing the 2-D and 3-D seismic studies undertaken at the Playa Vista Development Project site. The Division of Mines and Geology indicates there is no evidence to support the postulated Lincoln Boulevard fault (Section 6, Comment Letter #4).

The Division of Mines and Geology review of the data and information available regarding the two off-shore anomalies in the area of the entrance of Marina Del Rey indicates that there are several plausible explanations for the anomalies. (Section 6, Letter # 23). It appears that the anomalies could

be associated with depositional features characteristic of stream channels.

#### **4.3 City Review and Conclusions**

The BOE, LADBS, and ETI, reviewed the Davis and Namson study, the Earth Consultants International, Inc. report, and referenced studies and reports. The City departments, Division of Mines and Geology, and various consultants all agree that the geologic and geophysical data do not support the existence of the postulated Lincoln Boulevard fault (LADBS, December 19, 2000 (Appendix G); LADBS, February 28, 2001 (Appendix B); ETI, January 31, 2001 (b) (Appendix H)).

In addition, as indicated in the methane section above, methane gas at the Playa Vista Development Project site does not come from the Southern California Gas Company Playa Del Rey Gas Storage Field. Therefore, the potential for large volumes of methane gas to escape from the Southern California Gas Company Playa Del Rey Gas Storage Field in the event of an earthquake is unsupported by the evidence.

##### **4.3.1 Mitigations**

No mitigation over and beyond compliance with existing seismic building codes and methane mitigation measure discussed in the Methane section above is required.

## SECTION 5

### HEALTH RISKS OF BTEX AND H<sub>2</sub>S

#### 5.0 General Background

Methane gas is not a toxic air contaminant (TAC). However, some TACs, such as benzene, toluene, ethyl-benzene, and xylene (BTEX) and hydrogen sulfide (H<sub>2</sub>S) may be associated with methane emissions. The primary health risk of concern due to exposure to benzene is a potential increased risk of cancer. Non-cancer chronic and acute health effects are associated with BTEX and hydrogen sulfide. Potential non-cancer health effects of these pollutants of concern include eye and respiratory irritation, and central nervous system and reproductive concerns.

Potential health impacts associated with BTEX and H<sub>2</sub>S are dependent upon pollutant concentration and duration of exposure. The U.S. Environmental Protection Agency (EPA), the State of California Environmental Protection Agency Department of Toxic Substance Control (DTSC), California Office of Environmental Health Hazard Assessment (OEHHA), and other regulatory agencies use the benchmark of a cancer risk of  $1 \times 10^{-6}$  to indicate insignificant carcinogenic public health risk, with no further investigation or remediation warranted. Exposure to carcinogens (only benzene in the case of BTEX and H<sub>2</sub>S) is averaged over a 70 year period reflecting the experience that cancer associated with contaminants of concern may manifest itself several years after exposure to contaminants of concern has ceased. EPA and other regulatory agencies use the benchmark of a hazard index of 1 to indicate insignificant non-carcinogenic public health risk, with no further investigation or remediation warranted. Exposure to non-carcinogens is averaged over 30 years reflecting the experience that non-cancer health effects generally manifest themselves during exposure to contaminants of concern.

The City engaged the professional services of Kleinfelder to assist in evaluating potential health risks associated with BTEX and H<sub>2</sub>S associated with methane emissions.

#### 5.1 Review of Existing Information/Studies

##### Geomatrix Consultant Inc.

Geomatrix Consultant Inc. undertook an "Evaluation of Potential Public Health Impacts Associated with the Presence of Potentially Toxic Compounds in Soil Gas at Playa Vista," for Playa Vista Capital (July 25, 2000). The Geomatrix report indicates that an insignificant risk is associated with BTEX and H<sub>2</sub>S levels found at the Playa Vista Development Project site. The modeled ambient air concentrations of BTEX and H<sub>2</sub>S modeled by Geomatrix did not exceed the exposure levels cited above.

The Geomatrix report also examined worker exposures and concluded that mitigation measures were appropriate. The report indicates that "it is possible that the combination of an elevated H<sub>2</sub>S pocket and the confined space of an excavation could lead to an ambient air concentration in excess of

worker health criteria.”

## 5.2 Additional Information/Data Gathering

### City and Kleinfelder

The City and Kleinfelder reviewed the Geomatrix study and identified two concerns. First, the study appears to base its conclusions regarding residential exposure risks upon outdoor ambient air concentrations rather than upon more conservative indoor concentrations. Second, worker health criteria is less protective than health criteria established for the general public and the study concluded that ambient concentrations in confined spaces could potentially exceed worker health criteria.

### Kleinfelder

Kleinfelder reviewed the soil gas data from three different Playa Vista Development Project site soil gas surveys (Kleinfelder, February 7, 2001(a)). Those three studies comprise a total of 1,155 soil gas samples. Only 3% of the samples taken contained benzene, 2% contained methylbenzene, 4% contained m-, p-Xylene, and less than 1% contained H<sub>2</sub>S, 23% contained toluene, and 6% contained o-Xylene.

Kleinfelder conducted an HRA for BTEX and H<sub>2</sub>S (Kleinfelder, February 7, 2001 (a)). The HRA was conducted utilizing procedures established by the EPA, DTSC, and OEHHA. The HRA utilized very conservative assumptions to assure maximum protection of public health.

The HRA assumes that an adult lives indoors on the site 24 hours a day, 350 days a year (leaving the site for only two weeks during the year) for 30 years. Indoor exposure to BTEX and H<sub>2</sub>S is the worst case exposure scenario as gasses would be contained and not dispersed or diluted as would be the case with outdoor conditions. Inhalation exposure for adults (20 m<sup>3</sup>/day) is greater than for children (10 m<sup>3</sup>/day) due to the larger lung capacity of adults. Therefore, for the inhalation pathway adult exposure represents the worst case scenario and would be protective of children's health. The exposure duration of 30-years, 350 days a year, 24 hours per day is a standard assumption established by EPA and utilized by DTSC and OEHHA.

The HRA assumes an adult is continuously exposed to highest level of benzene (3.85 ppmv) detected at the Playa Vista Development Project site. The benzene level of 3.85 ppmv was only detected once in the 1,155 soil gas samples analyzed and is magnitudes higher than the next level of benzene detected (1.05 ppmv). The conservativeness of assuming continuous exposure to the highest benzene level detected is further magnified by the fact that benzene was not detected in 97% of the 1,155 samples analyzed.

Based upon the above methodology, cancer risk at the Playa Vista Development Project site was estimated in the HRA at  $1 \times 10^{-7}$ , well below the benchmark of insignificance. Using the average concentration of benzene detected at the site, still a conservative assumption since the average

benzene concentration is based upon the average of only 34 of the 1,155 samples taken in which benzene was detected, the estimated cancer risk is substantially lower:  $7 \times 10^{-6}$ .

Non-cancer hazards for BTEX and H<sub>2</sub>S were assessed in the HRA utilizing the highest concentration of each of the pollutants of concern. For the same reasons discussed above, this is a very conservative assumption since pollutants of concern were detected in relatively few soil gas samples and in limited areas of the site. The non-cancer hazard index for the maximum concentrations of BTEX and H<sub>2</sub>S detected at the site is estimated at 0.051, well below the benchmark of insignificance. The non-cancer hazard for the average concentration of the BTEX and H<sub>2</sub>S (still a conservative assumption since of the total of 1,155 soil gas samples taken only 34 contained benzene, 267 contained toluene, 18 contained ethylbenzene, 49 contained m-,p-Xylene, 71 contained o-Xylene, and 10 contained H<sub>2</sub>S) is estimated at 0.0001, again well below the benchmark of insignificance.

Both ETI and Kleinfelder concluded that the source of BTEX and H<sub>2</sub>S observed at the Playa Vista Development Project site is associated with near surface soil and/or groundwater contamination and is not directly associated with methane observed at the site (ETI, 2000; Kleinfelder, February 7, 2001 (b)).

#### Integrated Environmental Services, Inc.

Since the BTEX contamination was determined to be associated with soil and groundwater, the City wanted to ensure that the cumulative health impacts associated with BTEX, H<sub>2</sub>S, and other potential soil and groundwater contaminants were being appropriately addressed. The LARWQCB is the lead state agency currently overseeing the remediation efforts at the Playa Vista Development site and is coordinating and consulting with OEHHA as appropriate.

Soil and groundwater for the entire Playa Vista Development Project site will undergo separate, phased remediation programs. To expedite the cleanup of contaminated soils and groundwater, while ensuring protection of human health and the environment, a health based remediation program was developed by Integrated Environmental Services, Inc., reviewed by OEHHA, and approved by the LARWQCB (Integrated Environmental Services, Inc., February, 2000; OEHHA, December 9, 1999; LARWQCB, December 27, 1999 and July 7, 2000). The health-based remediation strategy is designed to ensure that soil and groundwater contamination is remediated to a level of insignificance and that cumulative impacts associated with multiple contaminants and multiple exposure pathways do not exceed acceptable levels.

The health based remediation program derived constituent/pollutant-specific remediation goals so that exposure to any single constituent will result in incremental lifetime cancer risk of  $1 \times 10^{-6}$  or less and a hazard index of 0.2 or less. The use of such health based goals in soil and groundwater cleanup would result in site conditions that pose no significant health risk to future users from exposure to any one constituent. However, due to the complexity of exposure to multiple pollutants of concern through multiple exposure pathways, the cumulative health impacts associated with post-remediation site conditions cannot be fully characterized until site cleanup is complete. For this reason, the LARWQCB will require an assessment of final site conditions with post-remediation

confirmation sampling to verify that cumulative effects of pollutants of concern are adequately addressed and final remediation is protective of human health and the environment from a cumulative perspective.

The Playa Vista Development Project site has already undergone comprehensive environmental investigation and soil and groundwater remediation has been initiated, and in some instances completed.

The LADBS has established procedures to ensure that construction activities at sites with known contamination are precluded from commencing or continuing work until written clearance of appropriate remediation is received from the lead agency (LADBS, February 6, 1989). In the specific case of the Playa Vista Development Project site, the LADBS and LARWQCB are in close contact regarding site construction issues and clearances.

### **5.3 City Review, Conclusions, and Mitigations**

Potential health risks associated with BTEX and H<sub>2</sub>S soil gas emissions at the Playa Vista Development Project site, whether associated with methane or soil and groundwater contamination, are below the benchmarks established by EPA, DTSC, OEHHA, and other regulatory agencies to indicate insignificant risk, with no further investigation or remediation warranted.

With regard to other soil contaminants, the LARWQCB, in coordination with OEHHA, has established a soil and groundwater remediation process which adequately protects human health and the environment, including addressing potential cumulative impacts. The health based remediation strategy established for the Playa Vista Development Project site is comprehensive in nature and will consider BTEX soil gases in the cumulative HRA completed for the site as remediation activities are completed. The LADBS has established procedures to ensure close coordination between the City and the LARWQCB as site development progresses. Therefore, potential cumulative impacts associated soil and groundwater contamination, including BTEX, will be addressed in a manner that is protective of human health.

#### **5.3.1 Mitigations**

None required. The mitigation measures proposed for methane would further reduce the potential health risks associated with soil and groundwater contamination. The impermeable membrane required for methane mitigation would not only serve to ensure that methane is precluded from entering buildings and other confined spaces, but would also preclude soil gases of concern from entering those same spaces.

## SECTION 6

### **Comment Letters Received on the March, 2001 CLA Report on Playa Vista Development Site**

The CLA Report on Playa Vista Development Site dated March, 2001 was released for a 30 day public comment period. Copies of the Report were directly mailed to more than 100 individuals, noticed in *Argonaut* and *Daily Breeze* newspapers, placed on the City's web site, and noticed via availability notices mailed to over 500 addresses. Twenty-four comment letters were received. Comment letters and responses to comments are included in this Section.

Comment letters received are as follows:

- Comment Letter #1: Howard Hackett, Past President Del Rey Homeowners
- Comment Letter #2: Alfredo Urso
- Comment Letter #3: Debra-Lynne Terrill
- Comment Letter #4: William Bryant, Program Manager, Active Faults, California Department of Conservation, Division of Mines and Geology (also see Comment Letter #23)
- Comment Letter #5: Airport Marina Group Sierra Club, Ballona Ecosystem Education Project, Grassroots Coalition, and Spirit of the Sage Council
- Comment Letter #6: Patricia Trujillo
- Comment Letter #7: Julia Judge
- Comment Letter #8: Thomas Judge
- Comment Letter #9: Patricia McPherson, President, Grassroots Coalition; Rex Frankel, Chair, Ballona Ecosystem Education Project; Kathy Knight, Special Projects Coordinator, Spirit of the Sage Council and Conservation Chair, Airport Marina Group Sierra Club
- Comment Letter #10: Rose MacHardy
- Comment Letter #11: Jonathan Aurthur
- Comment Letter #12: 132 Form Letters with original individual signatures delivered by Playa Capital Companies, LLC
- Comment Letter #13: Stewart Morris
- Comment Letter #14: Leslie Purcell
- Comment Letter #15: Rick Archer, USC Earth Sciences
- Comment Letter #16: Marcia Hanscom, Executive Director, Wetlands Action Network; Robert van de Hoek, Chair, Sierra Club Ballona Wetlands Task Force
- Comment Letter #17: John Geroch, Associate Engineering Geologist, Site Cleanup Unit I, California Regional Water Quality Control Board, Los Angeles Region  
Attached Memorandum from Julio Salinas, Ph.D. Hazardous Waste Toxicology Section, Office of Environmental Health Hazard Assessment to John Georch, LARWQCB



Comment Letter #18: Suzanne M. DeBenedittis  
Comment Letter #19: Faye Ku  
Comment Letter #20: Bryan Gordon  
Comment Letter #21: Michael De La Torre, Southern California as Company  
Comment Letter #22: Kenneth E. Trott, Environmental Coordinator, California Department  
of Conservation  
Comment Letter #23: William Bryant, Program Manager, Active Faults, California  
Department of Conservation, Division of Geology and Mines (also  
see Comment Letter #4)  
Comment Letter #25: Giyora Doeh

Comment Letter #1

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CLA

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March 14, 2001

Ronald F. Deaton  
City of Los Angeles  
Office of the Chief Legislative Analyst  
Room 512 City Hall  
Los Angeles, CA. 90012

Dear Sir,

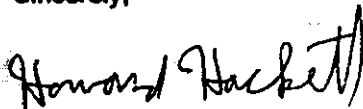
Thank you for a copy of the "City Investigation of Potential Issues of Concern for Community District No. 4 Playa Vista Development Project" March 2001.

Although I am not an expert in any of the fields studied, I feel that the report answers all of the questions about the perceived ecological risks and dangers brought up by the opponents of the overall project.

This project has been stalled way to long by mostly bogus complaints and frivolous lawsuits.

In my opinion, the next steps should be taken expediently. If any other issues are raised they should be disregarded as irrelevant, costly, and regarded as a strategy to further stall the project.

Sincerely,



Howard Hackett  
Past President-De Rey Homeowners  
5208 Etheldo Avenue  
Culver City, CA, 90230-6025

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CLA

Comment Letter #2

01 APR -5 PM 12: 26

April 4, 2001

Ronald F. Deaton  
Chief Legislative Analyst

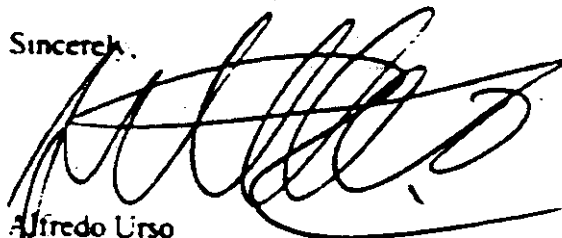
Re: Playa Vista - Mello-Roos

I will keep this simple.

The more I learn about the Playa Vista development the more I am appalled that the city of L.A would even consider issuing Mello-Roos bonds!

1. This development is bad for the health of the people that live in the area. |2- 1
  2. Apart from the increased illness factors this project is not structurally sound and could be dangerous to potential residents. |2- 2
  3. It is irresponsible to take this last piece of wetlands ecosystem away from the wildlife who depend on it for their survival. |2- 3
  4. Whatever development has already been undertaken has to a large degree been immoral and illegal. |2- 4
- Whichever way you look at it, this project is doomed to fail and to cause problems and law suits extending far into the future. |2- 5
- Keeping the Ballona ECO-system will benefit all of us , humans and wildlife. |2- 6
- DEFINITELY NO MELLO-ROOS BONDS FOR PLAYA VISTA.

Sincerely,



Alfredo Urso  
4710 La Villa Marina # C  
Marina Del Ray, 90292

April 3, 2001

RECEIVED  
CLA

Barb Garrett  
Office of the Chief Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

01 APR -5 PM 12:36

Dear Ms. Garrett:

I have reviewed the City Investigation of Potential Issues of Concern for Community Facilities District No. 4 Playa Vista Development Project. There are a number of key problems with the report as presented:

1. Figure 2.1, Playa Vista Development, Los Angeles California, Methane Concentrations (ppmv) 4 Foot Gas Survey reflects methane concentrations at one point in time. Many of the methane concentrations are in the 40,000 parts per 1,000,000 parts range, i.e., dangerous levels. It is not properly reflected in the report that this methane migrates. In effect, methane situated in one location at these dangerous levels will move to other locations if it cannot freely escape through the surface. The concrete ground covering created by the proposed Playa Vista Development will force methane to migrate to the surrounding areas, creating dangers beyond the Development itself. Even if the problem is mitigated with protection, there is no guarantee of safety due to the volatile nature of methane. Residences and businesses in the areas surrounding the proposed Playa Vista Development are put at risk. 3- 1
2. While many methane problems can be contained and mitigated under normal, stable ground conditions, the proposed Playa Vista Development would be built over unstable ground conditions requiring pilings. It is impossible to create the necessary containment and mitigation methane sealants under these conditions. 3- 2
3. Figure 2.1 reflects a soil gas survey limited to only four feet. It is prudent to survey a site with Playa Vista's inherent properties at a number of different levels. It is irresponsible and potentially reckless to limit the gas survey to only the four feet level. 3- 3
4. The proposed Playa Vista Development is situated in Southern California, which has a high propensity for earthquakes. While some faults have been identified, others, as Santa Monica discovered in 1994, are hidden. The high methane concentrations as already identified on the property, and there will be surely more when different levels are surveyed, create a hazardous and potentially explosive situation in the event of earthquakes. 3- 4
5. The samples taken to assess the presence and concentration of H<sub>2</sub>S at the proposed Playa Vista Development site were not described in full and appropriate detail. The details are very important because the nature of the site, combining 3- 5

methane and bacteria from organic matter, indicates that much higher levels of H<sub>2</sub>S would be present than disclosed in the report. The H<sub>2</sub>S sampling process used to make the assessment and evaluation process needs to be clearly disclosed. It is implausible that less than one percent of the samples contained H<sub>2</sub>S. In effect, the statements made regarding the health risk are not properly founded.

3- 5

6. The report fails to take into account the ramifications of methane, as a freely rising gas, interacting with benzene, toluene, ethyl-benzene and xylene, which flow closer to the ground. Proper disclosure requires that the impact of this interaction of gases be addressed.

3- 6

7. It is prudent that the Division of Oil and Gas would require that the proposed Playa Vista Development replug any wells present in the project area to present-day standards. While it is also a positive step that the Division would also require the developers to have unrecorded wells identified during development to be abandoned and plugged to present-day standards, it is reasonable to expect that not all of the unrecorded wells would be identified. The proposed Playa Vista Development sits on what might be described as a massive minefield of unrecorded wells. Since it is impossible to identify all of the unrecorded wells, it is reasonable to assume that the problems associated with those wells would not be mitigated and would pose an inherent danger.

3- 7

8. While it is reasonable to expect that membranes designed to contain methane in stable areas may be impermeable for extended periods of times, the sandy soil of the proposed Playa Vista Development which required pilings for development, does not provide a suitable foundation for membranes that will meet the test of time with impermeability.

3- 8

9. While pipes can help to mitigate the flow, they can also be problematic, as evidenced by the explosion and fires in the Fairfax District.

3- 9

As a resident of Playa del Rey, I am very disturbed that this report either failed to address or glossed over important safety points. Unlike the people who were contracted by Playa Vista Capital and the contributing agencies, my life and property are at stake. I trust that you will address each of the points that I have identified.

3- 10

Most importantly, the report must be created by an independent consultant or a group of consultants who do not have and have never had relationships with Playa Vista Capital and/or related parties. The March, 2001 Report has no credibility due to its contributors.

Sincerely,



Debra-Lynn Terrill

340 Fowling Street

Playa del Rey, CA 90293

Phone: 310/821-9763; Email: [terril3@pop.mindspring.com](mailto:terril3@pop.mindspring.com)



DEPARTMENT OF CONSERVATION  
STATE OF CALIFORNIA CLA

01 APR 12 PM 2:36

DIVISION OF  
MINES & GEOLOGY

■ ■ ■

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■ ■ ■

GRAY DAVIS  
GOVERNOR

March 30, 2001

Barb Garrett  
Office of Chief Legislative Analyst  
512 City Hall  
200 N. Main Street  
Los Angeles, CA 90012

Dear Ms. Garrett:

This letter is a follow-up to our meeting on February 6, 2001 regarding the proposed "Lincoln Boulevard" fault and the Playa Vista site. At your office's request, I am nearing completion of reviews of fault investigation reports by Davis and Namson (11/16/2000) and Earth Consultants International (ECI, 7/25/2000), as well as a review of the data presented in the Exploration Technologies, Inc. report (ETI, 4/17/2000). We are scheduled to meet with T. Davis of Davis and Namson and D. Francis of California State University, Long Beach regarding interpretation of seismic data collected offshore of the Playa Vista site on April 17. I will summarize my preliminary conclusions.

**Executive Summary**

Based on my review of these reports, I find that there is no evidence to support the existence of the proposed "Lincoln Boulevard" fault. The ETI report attempted to explain the presence of methane gas detected at the Playa Vista site by postulating a fault they inferred to be potentially active (active within the past 1.6 million years). Because the existence of a methane gas anomaly does not require the presence of a fault, ETI cited several sources in support of the proposed "Lincoln Boulevard" fault. These sources reported a minor, approximately 2500-foot long fault located 1500 feet south of the Playa Vista site. However, that minor fault does not offset sedimentary rocks younger than 3 to 5 million years.

Reports by Davis and Namson and ECI addressed the deep subsurface and near surface conditions, respectively, of the Playa Vista site and its immediate area, as well as evaluated the literature cited by ETI. Davis and Namson concluded that

Barb Garrett  
March 30, 2001  
Page 2

the literature cited by ETI does not support the existence of a potentially active "Lincoln Boulevard" fault and supplied additional information that questions the existence of the minor bedrock fault located 1500 feet south of the site. The combination of geologic cross-sections based on oil well data and geophysical imaging of the Playa Vista site and the area to the south documented in the Davis and Namson report shows unfaulted 3 million year old sedimentary rocks in the vicinity of the proposed "Lincoln Boulevard" fault.

The ECI report investigated near-surface conditions at the Playa Vista site and reviewed previous fault investigations that mapped the 200,000 to 600,000 year old Lakewood Formation exposed in the bluffs just south of the site. Based on mapping no evidence exists for the proposed "Lincoln Boulevard" fault in the bluffs south of the site. ECI's subsurface investigations document that sedimentary deposits about 15,000 years old and younger are not offset along the inferred surface trace of the proposed "Lincoln Boulevard" fault. Both Davis and Namson and ECI concluded that the evidence of a surface trace of the proposed "Lincoln Boulevard" fault in the terrace surface south of the Playa Vista site reported by ETI (based on Metzner, 1935) is not supported in the geologic literature.

#### **Analysis**

In order to explain the detection of thermogenic methane gas, ETI postulated a north-northwest striking fault located sub-parallel to and just east of Lincoln Boulevard. This postulated fault, which ETI referred to as the "proposed Lincoln Boulevard fault," was characterized as a west-dipping normal fault (apparent dip  $58^\circ$  in ETI cross section A-A'). The older sedimentary rock formations in ETI cross section A-A' are displaced less than the younger formations, suggesting that the cross section is diagrammatic and the amount of bedrock displacement is poorly constrained. The diagrammatic nature of ETI's geologic cross-section is also suggested by the presence of data from only one oil well (Universal City Syndicate Vidor #1) that has been projected 2800 feet into cross section A-A'. Above the Pico/Repetto contact, displacement of the Pico Formation is diagrammatically inferred by discontinuous lines (bedding?) that have an apparent vertical separation suggestive of dip-slip displacement, but in the opposite sense (down to east) to offsets depicted lower in the cross-section (refer to attached stratigraphic column (ECI's Figure 3) for ages of sedimentary units).

In support of the existence of the proposed "Lincoln Boulevard" fault, ETI cited reports by Metzner (1935), Hodges (1944), Riegle (1953), and Wright (1991). Davis and Namson, in reviewing these reports, noted that Metzner (1935) showed a minor fault in the southeastern corner of section 27 (T 2S, R 15W) offsetting the top of the Catalina Schist (basement rock) (Metzner's Plate III). Metzner interpreted the existence of the fault based on changes in the

Barb Garrett  
March 30, 2001  
Page 3

amounts of oil and water production between wells drilled into the oil and gas bearing schist conglomerate deposited on top of the basement rock. However, Metzner found no evidence of displacement along this inferred fault. This fault shown on Plate III extends for only about 2500 feet. Metzner's cross sections B-B' and C-C', located immediately to the north, do not show this fault and depict unfaulted Catalina Schist and overlying Miocene Puente Formation.

Hodges (1944, Plate II) also interpreted a minor fault offsetting the Catalina Schist as interpreted by Metzner (1935). This fault extends for only about 2500 feet and has an apparent vertical separation of the top of the basement rock of about 150 feet, down to the west. As interpreted by Hodges (1944, Plate I), this fault does not extend into and above the "Upper Bentonite Marker" (Upper Repetto Formation). Riegle (1953) shows the fault as depicted by Metzner and Hodges and supplies no new data.

Wright (1991) shows this minor bedrock fault interpreted by Metzner and Hodges in his cross section A-A' as a west-dipping normal fault that extends into Repetto Formation, but doesn't offset the Pico/Repetto contact. It is not clear from Wright's cross section how much, if any, displacement of contacts this fault may have. Davis and Namson state that the fault shown by Wright is based on reports by Metzner (1935) and Hodges (1944) and presents no new information.

Davis and Namson cite an unpublished report by Hester (1986) for the Southern California Gas Company. Hester reported that he could find no evidence for the fault in the southeastern corner of section 27. Davis and Namson concluded that the fault interpretation of Metzner (1935) is a non-unique explanation for the variations in oil and water production in the schist conglomerate layer deposited on the Catalina Schist.

ETI concluded that the proposed "Lincoln Boulevard" fault was potentially active (active within the past 1-6 million years) because of the assumption that the fault was expressed in the terrace surface south of the Playa Vista site. Surface expression of the proposed "Lincoln Boulevard" fault was inferred by ETI, based on a discussion of topographic provinces by Metzner (1935). Metzner divided the terrace just south of the Playa Vista site (Del Rey Hills) into 4 sub-provinces based on geomorphic expression and concluded that sub-provinces 3 and 4 were separated by a fault. Although Metzner stated it was unlikely that the surface morphology was due to eolian deposition, the preponderance of evidence in the literature supports an interpretation that the surface morphology is the result of either eolian deposition, offshore bar deposition, or a combination of depositional features, but not faulting (Eckis, 1934; Pierce and Pool, 1938; Pierce, 1939; Woodring and others, 1946; Poland and others, 1959; Handin, 1951; Poland and Piper, 1956; Terry and Uchupi, 1957; Merriam, 1949; Cooper, 1967; and Lajoie and others,



Barb Garrett  
March 30, 2001  
Page 4

1992). Davis and Namson pointed out that although Metzner inferred a fault between his sub-provinces 3 and 4, he did not show a fault in his subsurface map of the top of the Catalina Schist.

My conclusion, as well as that of Davis and Namson, is that the literature cited by ETI in support of the proposed "Lincoln Boulevard" fault in fact does not document the presence of a fault.

In addition to literature review, Davis and Namson constructed cross-sections and subsurface maps of the Playa Vista region based on extensive oil well data, purchased Chevron seismic reflection line LAB 84-4 (located about 6000 feet south of the Playa Vista site), and acquired 2D high resolution reflection seismic data and 3D seismic survey data. The Chevron line LAB 84-4 data show reflectors (upper Repetto Formation) that are continuous and unfaulted across the projected location of the proposed "Lincoln Boulevard" fault. The 2D reflection seismic data show continuous, unfaulted reflectors correlated with the upper portion of the middle Pico Formation and interpretations of the 3D seismic survey indicate continuous reflectors correlated with the middle Pico Formation. This indicates that there has been no displacement in the past 3 million years.

The report by ECI addresses the near surface evidence for or against the proposed "Lincoln Boulevard" fault. ECI used existing borings and CPT data and CPT data collected for this investigation to document near surface (upper 50 feet) conditions across the surface trace of the proposed "Lincoln Boulevard" fault. In addition, ECI cited reports by Converse Ward Davis, Dixon (1979) and LeRoy Crandall and Associates (1982, 1983, 1991) that document a lack of faulting in the late Pleistocene Lakewood Formation exposed in the bluffs immediately south of the site.

A key marker bed is the "50-foot gravel layer" of Poland (1959). ECI drove their CPT borings to the top of this latest Pleistocene gravel layer and produced a structural contour map of the top of this unit. The gravel layer has a shallow westerly gradient and an irregular, constructional surface consistent with data reported by Poland and others (1959). ECI stated that, based on the irregular configuration of the top of the latest Pleistocene gravel, a vertical displacement of 2 to 4 feet would not be detected. However, the lack of faulting observed in the older late Pleistocene Lakewood Formation exposed in the bluffs to the south of the Playa Vista site and the lack of offset of overlying Holocene fluvial deposits at the site supports ECI's interpretation that there is no offset of the late Pleistocene gravel layer. ECI concluded that there was no evidence supporting the existence of the postulated "Lincoln Boulevard" fault.

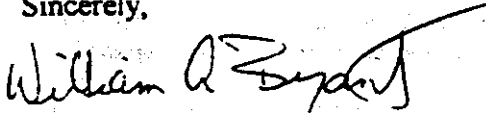
Barb Garrett  
March 30, 2001  
Page 5

**Preliminary Conclusions**

In conclusion, my preliminary review of the Davis and Namson report and the ECI report indicates that they have adequately documented that the proposed "Lincoln Boulevard" fault as characterized in the 4/17/2000 Exploration Technologies, Inc. report does not exist. The investigations of the near surface conditions by ECI and the subsurface geologic conditions to the top of basement rocks by Davis and Namson represent a creditable and integrated effort at fault investigation.

I anticipate completing my review in the next few weeks.

Sincerely,



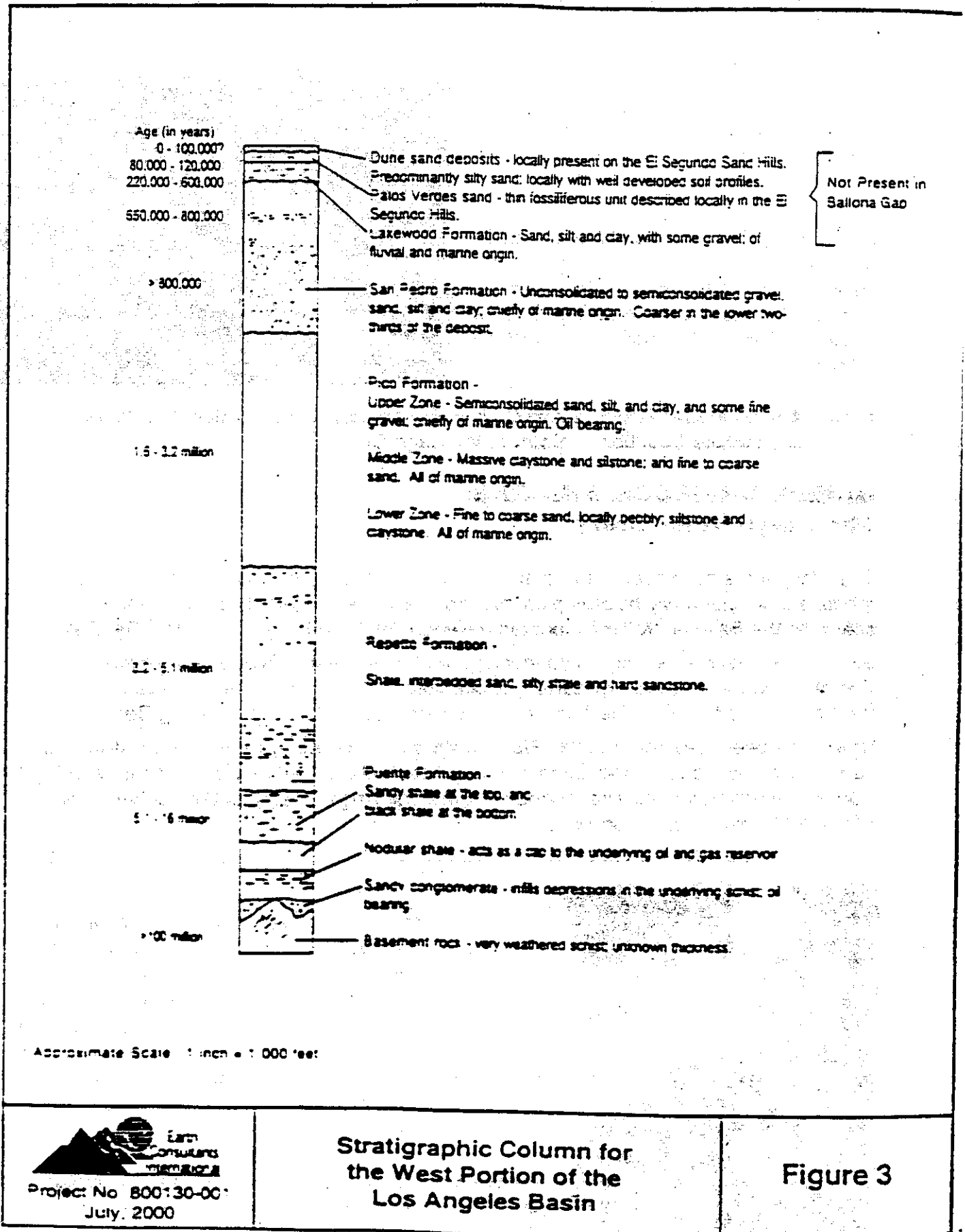
William A. Bryant, CEG 1554  
Program Manager, Active Faults

Encl

cc J Davis, State Geologist  
M Reichle, Supervising Geologist

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Project No. 800130-00  
July, 2000

Stratigraphic Column for  
the West Portion of the  
Los Angeles Basin

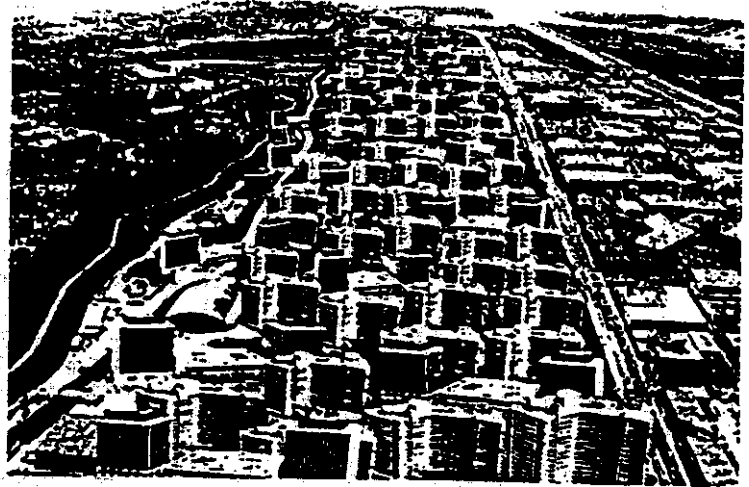
Figure 3

**Campaign to Save All 1,087 Acres of Ballona Wetlands & West Bluffs in Playa del Rey, CA**  
11924 W. Washington Blvd., Los Angeles, CA 90066, 310-636-3506, [www.saveballona.org](http://www.saveballona.org)

April 3, 2001

Office of the Chief Legislative Analyst  
Mr. Ron Deaton  
200 N. Main St. Room 512  
Los Angeles, CA 90012

Re: Inadequacies of CLA Report dated March 6, 2001 regarding dangers/mitigation plans at Playa Vista in Playa del Rey, California. Reply requested. Copies of video and this letter delivered to attached list.



From: Airport Marina Group Sierra Club • Ballona Ecosystem Education Project  
Grassroots Coalition • Spirit of the Sage Council.

### **GREED, GRIDLOCK AND GAS: The Playa Vista Story**

The Playa Vista developers have plans to construct thousands of condominiums, apartments and single-family houses plus millions of square feet of office and commercial space on the Ballona Wetlands located between the LA Airport and Marina Del Rey.

By their own estimates, this would increase traffic on the 405 Freeway by almost 1/3rd. The result will be to create massive gridlock that could paralyze the entire western part of the city and impact everyone from Malibu to Northridge and south to Long Beach.

Now it has been revealed that the Playa Vista site is situated over an abandoned oil field that is leaking toxic and flammable gas, much like the infamous Belmont Learning Complex which had to be abandoned after the Los Angeles School District had spent almost \$200 million constructing it.



The gases identified at Playa Vista are known to cause birth defects, cancer, and brain damage in growing children. By allowing the construction of a residential community on this dangerous land, the City and State are making themselves vulnerable to hundreds of millions of dollars in damages should the residents be injured or made ill by these toxic and explosive gases. These damages have the potential to bankrupt the City.

Our elected Los Angeles officials need to investigate and answer the questions of concerned citizens that follow:

**THE LOS ANGELES SCHOOL DISTRICT WAS FORCED TO ABANDON THE BELMONT HIGH SCHOOL COMPLEX AFTER SPENDING \$200 MILLION DOLLARS BECAUSE THEY COULD NOT PROTECT THE STUDENTS FROM THE DANGEROUS GASES SEEPING UP THROUGH THE EARTH.**

**QUESTION** If the experts could not design a reliable mitigation system for a single 35 acre high school site, what guarantee can the City and Developers provide that the massive mitigation system required for the thousand acre Playa Vista site will guarantee the safety of its residents who will face continuous exposure to Prop65 B-Tex and H2S chemicals which are known to cause birth defects, brain damage and cancer?

5- 2

**THE CITY OF LOS ANGELES IS ALREADY PAYING OUT MILLIONS OF DOLLARS IN TAXPAYERS' MONEY TO SETTLE THE RAMPARTS POLICE CORRUPTION SCANDLE. NOW SOME OF OUR ELECTED OFFICIALS ARE PROMOTING THE CONSTRUCTION OF A HOUSING PROJECT ON A SITE KNOWN TO BE CONTAMINATED BY TOXIC GASES.**

**QUESTION** Knowing the City could face hundreds of millions of dollars in punitive damages if any resident of the Playa Vista development were to be killed, injured or made ill by the gases, why are these Officials so vigorous in their support of this development?

5- 3

**THE CITY'S OWN EXPERTS HAVE VERIFIED THAT THERE IS A GAS SEEPAGE PROBLEM AT THE PLAYA VISTA SITE AND CALLED FOR AN EXPENSIVE MITIGATION SYSTEM. IN THE CHIEF LEGISLATIVE ANALYST'S REPORT (CLA) REPORT ON PLAYA VISTA DATED MARCH 6, 2001 THERE ARE SEVEN (7) MITIGATION REQUIREMENTS LISTED. THE REPORT ALSO STATES THAT, ONCE THE UNITS ARE SOLD, THE HOME OWNERS WILL BE HELD RESPONSIBLE FOR MAINTAINING AT LEAST SOME OF THE FOLLOWING SYSTEMS:**

- (1) Gas detectors required in all basements**
- (2) Audible ALARMS required**
- (3) Visual ALARMS required**
- (4) Automatic notification of LA FIRE DEPARTMENT required**
- (5) Automatic continuous data collecting sensors required**
- (6) Methane sampling collection accessible to the homeowners association; LA FIRE DEPARTMENT required**
- (7) Ventilation pipes required**

**QUESTION** By law there must be full disclosure to potential buyers of the hazardous gas problems at Playa Vista where condominium and single family dwellings will be priced from \$300,000 to several million dollars. Once buyers are made aware of the hazards they face living at Playa Vista, and the almost unlimited expense and liability that will accrue to the Playa Vista Homeowners Association once the units are purchased, what guarantee can the City and Developers give us that the units will actually be sold?

5- 4

**QUESTION** If the approximately \$500,000,000 in taxpayer subsidies and bonds issued to build Playa Vista, and further investigation reveals that the planned gas mitigation techniques are inadequate, and the entire development has to be abandoned as was the case at the Belmont High School, who will reimburse the public for these hundreds of millions of dollars in losses?

5-

**QUESTION** And if the project is abandoned after being partially or fully completed, who will pay for its deconstruction and the restoration of the Wetlands? Or would it be left to weather and rot.

5-

**REGARDING THE OVER 200 OLD AND LEAKING OIL AND GAS WELLS IN PLAYA VISTA, MARINA DEL REY AND VENICE PENINSULA RESIDENTIAL AREAS:**

For many years the City has ignored the serious well-leakage problems in the Playa Vista Playa del Rey area and allowed developers to construct homes around and directly over the deteriorating and poorly capped oil and gas wells that dot the landscape.

**QUESTION** Why did the City block efforts, that were earlier proposed by the Exploration Technologies Inc. testing company, to perform soil gas testing in the vicinity of these 200 plus old oil wells?

5

**QUESTION** Why has the City allowed Playa Vista to proceed with massive housing construction in areas that have the highest gas leakage problems, including the insertion of over three thousand pilings and other structures into the ground which provide additional paths for these toxic gases to enter the buildings and endanger their occupants?

5

**UNDERGROUND NATURAL GAS STORAGE:**

For over 50 years, Southern California Gas has used the Ballona Wetlands as a storage area for natural gas by injecting hundreds of billions of cubic feet of this gas, under high pressure, into the old Playa del Rey oil field. This has greatly aggravated the well leakage problems.

**QUESTION** On March 6, 2001 the City issued a CLA Report (Chief Legislative Analyst's Report) on the on the Playa Vista site. Why has the City taken such great pains to exonerated SOCALGAS from having any responsibility to the public regarding the dangerous conditions in the areas surrounding the underground gas storage field at Playa del Rey?

5

**EXPLOSIVE GAS BUILD-UP IN SHALLOW ZONES:**

It has been shown that the oil field gas continually migrates into the shallow 50 foot gravel zone that underlies the entire Playa Vista area, then spreads out laterally within this permeable zone, giving rise to a serious explosion hazard in areas far removed from the original source of the contamination. SOCALGAS and the City have both been aware of the dangers of this kind of gas migration in the shallow zones since the late 60's.

**QUESTION** Since there have been recent incidents in other areas of the country where, under similar conditions, underground gas has migrated and caused deadly explosions several miles from the source wells, what assurances can the city provide to the public that this will not happen in the Playa Vista development area?

5

**QUESTION** Why does the City now plan to issue close to \$500 million in taxpayer subsidies and bond issues to place thousands of residents on top of one of the worst gas seeps in the country?

5- 1

**A HIGHLY FLAWED REGULATORY PROCESS:**

SOCALGAS is allowed to perform self-monitoring of their gas storage operations, with virtually no oversight provided by the State of California Division of Oil and Gas (DOG), or the Public Utilities Commission (PUC), the regulatory bodies that were created to protect public health and safety.

**QUESTION** Why did the City rely upon consultants paid for by the Playa Vista developers, and allow the scope of the Study to be controlled by the law firm of Latham & Watkins who simultaneously represent SOCALGAS, Playa Capital and other real estate development interests in the Playa del Rey area?

5-

**Submitted by;**

**Airport Marina Group Sierra Club**

Chair Rex Frankel, 6038 W. 75th St., Westchester, CA 90045, 310-572-6491

**Ballona Ecosystem Education Project**

President Rex Frankel, 6038 W. 75th St., Westchester, CA 90045, 310-572-6491

**Grassroots Coalition**

President Patricia McPherson, 3749 Greenwood Ave., Los Angeles, CA 90066, 310-397-5779

**Spirit of the Sage Council**

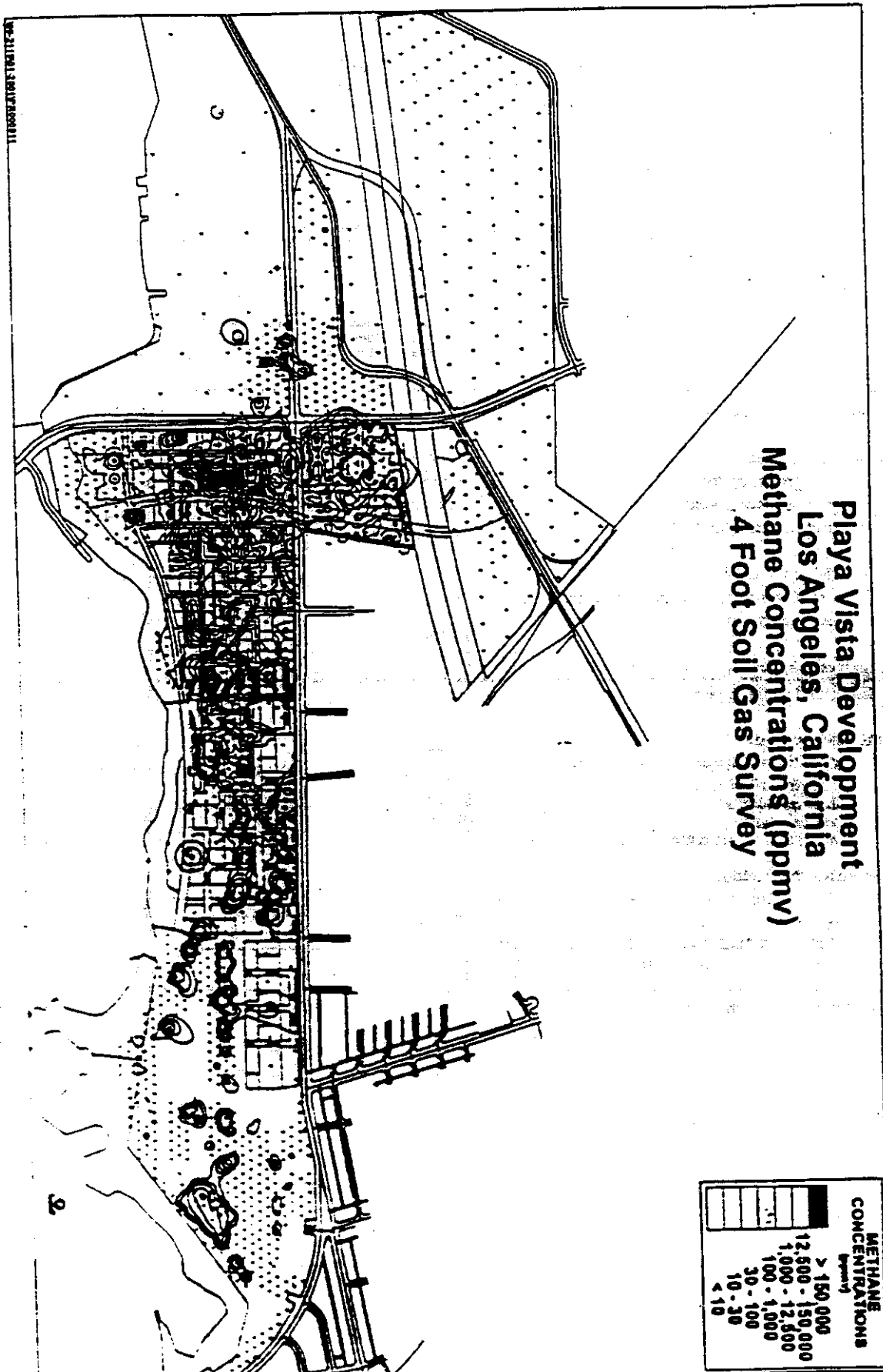
Special Project Coordinator Kathy Knight, 1122 Oak St., Santa Monica, CA 90405, 310-450-5961



**PLAYA VISTA PROJECT "MITIGATION REQUIREMENTS"**  
**CITY OF LOS ANGELES (CLA) REPORT**

**Comment Letter #5 con**

- (1) Gas detectors required in all basements.
- (2) Audible ALARMS required.
- (3) Visual ALARMS required.
- (4) Automatic notification of LA FIRE DEPARTMENT required.
- (5) Automatic continuous data collecting sensors required.
- (6) Methane sampling collection accessible to the homeowners association & LAFD required.
- (7) Ventilation pipes required.
- (8) Contingency plan required ... (gas masks?)



**Table 2-1: Methane Mitigations**  
**METHANE SYSTEM REQUIREMENTS**

A baseline soil gas survey shall be conducted for each building site to determine the areas of Playa Vista Phase I in which building methane prevention systems are required.<sup>1</sup>

Mitigation Measure	Methane Concentration Level		
	Level I <sup>2</sup> White: <10ppmv Blue: 10-<30ppmv Lt. Blue: 30-<100ppmv	Level II <sup>2</sup> Green: 100-<1000ppmv Yellow: 1000-<12,500ppmv	Level III <sup>2</sup> Orange: 12,500-<150,000ppmv Red: 150,000ppmv or >
<b>Methane Prevention System<sup>3</sup></b>			
Passive - Underneath the Building			
• 12" gravel blanket	Required	Required	Required
• gas collection vent pipe	Required	Required	Required
• impermeable membrane	Required	Required	Required
Active - Mechanical Ventilation			
• ventilation triggered with elevated methane concentrations	None	Required <sup>4</sup>	Required <sup>4</sup>
	None	None	Required
Subsurface Ventilation			
<b>Methane Detection System</b>			
Within the Building			
• detectors in spaces located in the basement/lowest level in the building <sup>5</sup>	Required	Required	Required
• audible alarm <sup>6</sup>	Required	Required	Required
• visual alarm <sup>6</sup>	Required	Required	Required
• automatic notification of LAFD <sup>6</sup>	Required	Required	Required
Underneath the Building			
• data collecting sensors below impermeable membrane <sup>3</sup>	None	Required	Required
• data collecting sensors between impermeable membrane and lowest floor/basement slab <sup>3</sup>	Required	Required	Required
<b>Methane Monitoring System</b>			
• manual quarterly assessment	Required <sup>7</sup>	None	None
• continuous methane sampling and data collection accessible by the homeowners' association, LADBS and LAFD via the Internet	None	Required <sup>8</sup>	Required <sup>8</sup>

<b>Maintenance of the Prevention, Detection and Monitoring Systems</b>  annual testing to the satisfaction of LADBS and LAFD homeowners' association to have financial responsibilities	Required Required	Required Required	Required Required
<b>Contingency Plan</b>  when high methane concentration are detected within a building when methane system components fail	Required Required	Required Required	Required Required

**Footnotes:**

1. Projects for which building permit applications were received by LADBS prior to January 1, 2002 may use as baseline methane concentration data the soil gas survey data prepared by CDM/ETI at Appendix 1. After January 1, 2002, all projects shall submit for approval to the satisfaction of LADBS, individual soil gas site assessments that characterize methane soil gas concentrations for the building site.
2. Levels of methane concentrations and corresponding colors on the methane concentration maps are identified in the Appendix 2 or individual building site soil gas assessments.
3. LADBS may reduce on requirements in areas where the methane concentrations in the area of building sites is non-detect.
4. When methane concentrations are detected at 37,500 ppmv by the sensors in the ventilation system below the impervious membrane, a mechanical ventilation system shall be automatically activated.
5. Number, type and location of detectors (or approved equivalents) to be determined by a qualified methane engineer, as approved by LADBS.
6. Audible alarm, visual alarm and notification of LAFD shall be triggered when methane concentrations are detected at 12,500 ppmv.
7. Sampling data reviewed by a qualified methane engineer shall be approved by LADBS. When such data is determined to be highly variable, additional manual sampling or electronic sampling may be required by LADBS. A qualified methane engineer shall submit a report to LADBS with conclusions and recommendations.
8. When the methane concentration data indicates significant changes in methane concentrations below the membrane, then a report by a qualified methane engineer shall be submitted to LADBS characterizing the reasons for such changes.

Copied from the Sepich Associates Report, January 30, 2001.

## Playa Vista's Traffic Impacts on the Westside

*King*

Lately, it seems one does not have to go far to find gridlocked traffic on LA's Westside, one of the most congested areas in the state, if not the country. Unfortunately, while Los Angeles city planners and development interests are busy approving one project after another, the consequences of this unrestrained development and increased density is more traffic congestion and gridlock on our roadways.

With our area's main collector roads, such as Centinela and Inglewood Ave. now unable to handle the current traffic capacity, increasing numbers of motorists are cutting through our residential streets, thereby posing a danger to pedestrians and children. Many of these "cut-through" motorists are also speeding. According to the Los Angeles Department of Transportation (LADOT), the intersections of Venice at Centinela and at Inglewood are now rated at "F". The rating scale used by the LADOT grades traffic flows from "A" through "F". "A" represents free flowing traffic with no delays, while those rated at "F" are experiencing jammed conditions.

In response to the increasing traffic congestion throughout our community, the Mar Vista Neighborhood Association, MVNA, has forged a unique partnership with, LADOT, in an attempt to reduce the increasing volume and speed of "cut-through" traffic on our residential streets. Unfortunately, the LADOT has few viable solutions that will produce any significant relief for our existing traffic. In fact, on a larger scale, the LADOT has neither the resources nor the tools to provide any substantial improvements to the Westside's traffic gridlock. In Venice and other nearby communities the City is proposing major road widening projects in response to traffic congestion. Major street-widenings must condemn adjacent businesses, reduce or eliminate the "buffer zones" between pedestrians and moving vehicles and reduce street parking spaces. Wider roads also divide and bisect communities and serve as high-speed traffic barriers. The Palms-Mar Vista-Del Rey District Plan states that road widening projects are not recommended for our area due to the negative consequences and "costs" imposed on the community. The character of our community influences our property values and road widenings will impact these values.

The current disconnect that exists between City Planning's continued accommodation of unrestrained growth and the LADOT's inability to handle the downstream effects of increased traffic congestion has caused over 75% of the Westside's major intersections to be rated at or beyond the capacity they were designed for. Most of these roads and intersections have received grades of "E" and "F" from the LADOT. LA's dysfunctional planning process will quickly cause all our roads to be rated "F" - unless we do something about it.

Given the current traffic congestion on the Westside, it is even more shocking that the City of LA approved the Playa Vista development back in 1993. Traffic is already far worse than in 1993 and the project has only completed one building. According to the LADOT, Playa's Master Plan will add over 224,000 vehicles per day on the Westside. According to Playa Vista's own ER (page III-43) the "Master Plan project traffic increases would range from 36% - 56% along the Jefferson, Culver and Centinela Corridors". Based on the city's own documents, significant traffic congestion will result if Playa Vista is developed. Although Playa Vista claims that it will mitigate all its traffic impacts, it should be noted that there is no mechanism nor consequences in place that will hold the developer accountable to its claim that it must mitigate its traffic. The City's Building and Safety Dept. recently decided to deny approval of any new building permits until a lengthy 4 - 6 month study assesses the methane gas seepage that was recently discovered on the site. Adding insult to injury, Playa's survival is solely dependent on public subsidies. We are all unknowingly funding our own cut-through traffic.

In response to this, there are two choices: 1) we do nothing and wait until the traffic is at a crisis level or 2) use our knowledge of the facts and voices to let our leaders know our opinion. If you chose option 2), write to your Councilmember, the Mayor and city planners and let them know your concerns.

RECEIVED  
CLA

01 APR -6 PM 1:38

April 5, 2001

Barb Garrett  
Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

Re: Proposed Mello-Roos Financing of the Playa Vista Development Project

Dear Ms. Garrett:

I am against the proposed use of Mello-Roos bonds for the Playa Vista Development Project. I would think that the potential risk factors unearthed so far would make the investment of these funds for this proposed project out of the question.

6- 1

Dr. Jones and Exploration Technologies, Inc. originally found that the So. California Gas Co. Playa Del Rey Gas storage facility was a source of the methane contamination at the site.

6- 2

Since the off-shore seismic data concerning whether or not there are off-shore faults is as yet incomplete, and there is still uncertainty as to whether the Lincoln Blvd. Fault exists, I strongly urge that further investigation into the methane problem and earthquake risk be addressed before financial investment of Mello-Roos funds are granted.

6- 3

With reference to Figure 2.1 indicating methane concentrations, none of the streets are named, so I am unable to determine where the gas storage facility is in relation to the diagram. Proper street names would seem appropriate for such a diagram.

6- 4

As a resident of the area of the proposed Playa Vista Development Project, I am extremely concerned that there has not been adequate study of the methane contamination risk factors and that continuing with the development is not a good idea.

6- 5

It is one thing for the developers to risk their own funds in this venture, it is quite another to propose investment of public funds.

6- 6

Sincerely,



Patricia Trujillo  
7377 W 83<sup>rd</sup> Street  
Los Angeles, CA 90045

**Campaign to Save All 1,087 Acres of Ballona Wetlands & West Bluffs in Playa del Rey, CA**  
11924 W. Washington Blvd., Los Angeles, CA 90066, 310-636-3506, [www.saveballona.org](http://www.saveballona.org)

**SPOKESPERSONS for "Greed, Gridlock & Gas: The Playa Vista Story"**

**Bernard Endres, Ph.D.**  
**Systems Safety Engineer**

Bernard Endres is a trained Systems Safety Engineer, holding a Ph.D. from Pacific Western University. Additionally, he holds a Masters of Science in Engineering and Mathematics from the University of Michigan, and a Bachelors of Science in Aeronautical Engineering from the University of Detroit.

A long-time resident of Southern California, Endres is actively sought by environmental groups for his talents and expertise in oil and gas migration hazards and in geological and subsidence problems of the earth. He has worked and studied worldwide, been a guest lecturer and written papers, articles and co-authored a book on systems engineering and the issue of gas migration.

Through his research, studies and expertise he was instrumental in helping expose the toxic gas issues of the Belmont Learning Center site, has been a lecturer for both UCLA and USC on the environment, and has work experience spanning from The Aerospace Corporation to consulting in Environmental and Safety Engineering for corporations, non-profit organizations and for privately funded studies.

Endres has partnered with long-time volunteer and friend of the environment actress Patricia McPherson and Grassroots Coalition, and is currently working to bring out the truth regarding the toxic gas problems at Playa Vista. Endres can be reached for comments and interviews.

**Patricia McPherson**  
**Hazardous Toxic Sites Activist**

Patricia McPherson has been a political activist since the 1980's. A trained actor and journalist, McPherson was one of the primary stars of the television series "Knight Rider" and has acted in movies and commercials. She also is a former employee of Los Angeles magazine and holds a Bachelor of Arts in Graphic Communications. Since her acting career, she has devoted her time to being a full-time activist and friend of the environment.

McPherson has worked with Dr. Endres, who holds a Ph.D. in Systems Safety Engineering. Together, they have actively been involved and continue to educate the LA Unified School District regarding the Belmont Learning Complex site. The duo was instrumental in the disclosure of the toxic issues with the site, conducting research and testing in the area, and they have become experts on the issues of gas migration and other gas leaks throughout the city of Los Angeles.

As a concerned citizen of Los Angeles, an environmental activist, and a volunteer in issues of gas migration, McPherson is extremely knowledgeable and familiar with the entire Playa Vista development and other hazardous toxic sites in the city.

McPherson is available to speak to government leaders and the press regarding the unsafe development of Playa Vista in the Playa Del Rey area.

RECEIVED  
CLA

01 APR -6 PM 1:37

March 27, 2001

Ms. Barb Garrett  
Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

**RE: City Investigation of Potential Issues of Concern for Community Facilities  
District No. 4, Playa Vista Development Project**

Dear Ms. Garrett:

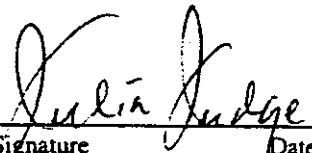
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First, because of the results. As a member of the local community, I am relieved to learn that there is no evidence of a new earthquake fault in our community, that the Gas Company natural gas storage facility is not leaking, that Playa Vista is not subsiding, that the site poses no health risks, and that there are mitigation measures for any methane detected on the site.

Second, as a long-time Playa Vista supporter, I want to see the project move forward. I hope that your Report allows us to put the issues investigated behind us once and for all and that we will finally see the realization of a project that creates community, stimulates economic development, and undertakes the much-needed restoration of the Ballona Wetlands.

Thank you for your consideration.

Sincerely,

 04/05/01  
Signature Date



Julia Judge  
8004 Cowan Ave.  
Los Angeles, CA 90045

City



RECEIVED  
CLA

01 APR -6 PM 1:37

March 27, 2001

Ms. Barb Garrett  
Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

**RE: City Investigation of Potential Issues of Concern for Community Facilities  
District No. 4, Playa Vista Development Project**

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Thank you for your consideration.

Sincerely,

*Thomas Judge*  
Signature Date  
Apr. 5, 01

F



Thomas Judge  
8004 Cowan Ave.  
Los Angeles, CA 90045

City

## Comment Letter #9

FAXED TO:

(213) 680-0085

April 9, 2001

Ms. Barb Garrett, Legislative Analyst  
City of Los Angeles  
200 No. Main St., Room 512  
Los Angeles, CA 90012

RE: Public Review Comments  
City Investigation of Potential Issues of Concern Re: Toxic Gas Problem at Proposed  
Playa Vista Site and Issuance of \$135 Million Mello Roos Bonds & Release of \$33.6  
Million Tax-Free Housing Bonds

Dear Ms. Garrett:

This letter is being written on behalf of Grassroots Coalition, Ballona Ecosystem  
Education Project, Airport Marina Group Sierra Club, and Spirit of the Sage Council.

We are totally appalled at the lack of carry-out of the mandate from last June 7, 2000 LA  
City Council Budget & Finance Committee hearing regarding this investigation. If you  
review carefully the minutes of that meeting, the Committee clearly wanted an  
independent investigation with experts hired by the City - NOT PLAYA VISTA'S  
CONSULTANTS AGAIN! This was the process that led to the INITIAL cover up in  
1993 of this enormous gas problem. This is outrageous!

Due to the fact that this comment is due today, and there are 3 major hearings tomorrow  
on Playa Vista issues (including 2 in Santa Barbara), we are going to have to give you  
brief comments today. We reserve the right to add more information later, as the time  
period for these comments was less than 30 days from when we received the report.  
One of the reasons we keep requesting and SEIR be done on this major change in the  
Playa Vista project, is so that the public would have the 45 days given us by law through  
the California Environmental Quality Act (CEQA).

We submit that you did not do what we have requested, namely a Subsequent  
Environmental Impact Report (SEIR) that needs to be done on this changed circumstance  
and extremely important new information that has come to light since the 1993 EIR was  
certified by LA City. This new information is drastically changing both the project, its  
impact on the surrounding community, and its mitigation systems. Also, an SEIR would  
result in all affected government agencies being notified of such a study, and the public  
would benefit from their comments. That is one of the main purposes of CEQA.

9- 1

9- 2

9- 3

GRASSROOTS ET. AL  
CLA REPORT  
4-9-01

We hereby incorporate all the objections and information we are submitting in the Los Angeles Building and Safety Commission Appeal of the Playa Vista Gas Mitigation System Board File No. 010041 and File No. 010042 being heard on April 9, 2001. We include the entirety of the proceedings including transcript, exhibits and the revocation of the permit, in view of the thoroughness of what we are setting forth. We also include in our comments all information submitted to the Los Angeles Building and Safety Dept. both previous to July 19, 2000 and since then, including the many briefings we have given LA City and Building and Safety staff. This is a voluminous record of information presented by citizens at their own expense and in their own volunteer "off hours" time. We do not have million dollar budgets, staff, nor office equipment to do this work. Therefore, we are unable to reproduce it for each and every hearing.

9- 4

It is a big disappointment to us that you do not seem to have looked at much of this critical information we have been submitting for the past 7 years.

In addition to the above, we have the following comments:

- 1) A proper oilfield study needs to be done of the over 200 leaking wells in this region. Development is being allowed over abandoned wells with no gas mitigation system nor disclosure to homebuyers. To not do such a study is endangering the lives of thousands of people. This needs to be done also to properly assess the problem at Playa Vista. No funding or building should be done until the problem is comprehensively defined.
- 2) A Hydrogen Sulfide study needs to be done of the Playa Vista site. The presence of the highly toxic H<sub>2</sub>S is documented in MANY city documents. This study **MUST BE DONE!**
- 3) This report and what is going on in the City of Los Angeles to cover up the dangers and honest characterization of the oil field dangers is at the point where we characterize it as fraud. The untruthful story is being perpetuated to server powerful developers and large law firms. It is time to **STOP!** The City of LA needs to come clean on what the situation is – or they could be bankrupted by a disaster bigger than the \$200 million taxpayer waste of Belmont High School. In addition, people could be sickened and killed – similar to the Hutchinson Kansas disaster last January.
- 3) This report is flawed from the beginning because no independent studies were done.
- 4) The CLA has not been truthful in saying that they never got the resumes of the underground gas migration experts we provided. We have documentation that Mr. David Hsu of LA Building and Safety walked them over to your office. To not draw upon these world class experts is unbelievable – especially when you have the worst gas seep over an oil field in the **WORLD!**

9- 5

9- 6

9- 7

9- 8

9- 9

GRASSROOTS ETAL,  
CLA Report  
4-9-01

- 5) Conclusionary statements are made in the report with no back up data. This would not be allowed under CEQA. | 9- 10
- 6) Subsidence has not been properly examined. | 9- 11
- 7) The Charnock fault does exist – it had an earthquake on it just last September 16, 2000. This fact alone shows what a ridiculous attempt to cover up the truth was used in the CLA report. | 9- 12
- 8) No public hearings are scheduled on this report. That is outrageous. We need a chance to hear from the public. CEQA would have provided for this! In addition, many people have told me they called your office to meet with someone, and were denied. This is NOT the public process that Mr. Michael Feuer requested on June 7, 2000. | 9- 13
- Again, we incorporate all previous data we have submitted to the City on what the dangers are of the Playa Vista site, surrounding area, and from SOCALGASCO's underground storage area. | 9- 14

Sincerely,

*Patricia McPherson* (sk)

Patricia McPherson  
President, GRASSROOTS COALITION  
3749 Greenwood Ave., Los Angeles, CA 90405  
(310) 397-5779

*Rex Frankel* (sk)

Rex Frankel, Chair  
BALLONA ECOSYSTEM EDUCATION PROJECT  
6038 W. 75<sup>th</sup> St., Los Angeles, CA 90045  
(310) 572-6491

*Kathy Knight*

Kathy Knight  
Special Projects & Wetlands Coordinator  
SPIRIT OF THE SAGE COUNCIL  
Conservation Chair  
AIRPORT MARINA GROUP SIERRA CLUB  
Mailing Address: 1122 Oak St  
Santa Monica, CA 90405  
(310) 450-5961

## Comment Letter #10

ALANandROSEMacHardy

TO: City Planning Department  
RE: CLA Report on Playa Vista.  
Date: April 9, 2001

I spoke at the July 18 Playa Vista hearing and would like to rebutt the findings of the CLA report by the City of Los Angeles. I understood that the investigation ordered by the City of LA would NOT be financed by Playa Capital or any of the investors in Playa Vista but by the City of LA, so as to prevent any bias towards Playa Vista. The CLA report DOES state that the investigation was paid for by Playa Vista.

This makes any of the CLA findings difficult to accept, especially when many scientific experts have testified that the problems with methane and toxics caused by them (as they usually are) to the area by oil drilling have been found to be a severe problem at Belmont High School, an area with many of the same problems as the Playa Vista area.

It seems to me that the proper study still needs to be done - NOT FUNDED BY EITHER PLAYA VISTA DEVELOPERS OR THE CITY - but a completely unbiased organisation. Otherwise, as said in my statement, the hypocrisy of the LA City Council who issued the permits for the PV project AND the corruption which the City of LA planning department is accused of by the concerned residents of the Playa community, must still stand. Please address this problem.

Sincerely,

*Rose MacHardy*

Rose MacHardy

(310) 827-7012

**jonathan aurthur**  
1115 euclid st. #5  
santa monica, ca 90403  
310 451 5258 aurthur@gte.net



April 9, 2001

To: Barbara Garrett, Office of CLA, Los Angeles  
213-680-0085

Re: CLA methane report regarding Ballona Wetlands/Playa Vista project

Dear Ms. Garrett:

I am writing to urge you to postpone approving the March CLA report pending further review of the methane, toxic gas, and seismic issues at the Playa Vista site, particularly Area D, Phase One.

I have read the March report, just as I read last year's gas/seismic report done by ETI, Inc. I know that the new document, which refutes key points made by ETI, purports to be a deepening of the first investigation. But given the role of seven consultants associated with Playa Capital in fabricating the new report, I do not have confidence in its reliability.

11- 1

I do not mean to question anyone's integrity or motives. But recent events in the medical world, for example—such as the Rezulin matter as handled by FDA and many other cases regarding research published in medical journals—suggest that even the most competent scientists tend, perhaps subconsciously, to skew their results in the interests of the companies or organizations they are working for and being paid by. Often such biases, even when unconscious, result in the sickness or death of innocent people.

Similarly, there is the possibility of serious illness or death at Playa Vista if the not-always-disinterested experts turn out to be wrong. I believe that this fact alone is enough to create caution about the new report.

11- 2

My recommendation: We now have two conflicting reports about the advisability of building structures on Area D of the Ballona Wetlands near Jefferson and Lincoln, about the existence of the Lincoln Fault, and about the possibility of mitigating methane hazards at the site in new apartment buildings. In other words, we have a *one-one tie*. I would argue that, given the serious nature of the matters we are dealing with, we need a *third* investigation, a tie-breaker, to settle the matter once and for all. This investigation should be thoroughly vetted through public hearings and carried out by *thoroughly disinterested* parties—individuals without *any* professional or financial connections to any of the parties with an interest in the project.

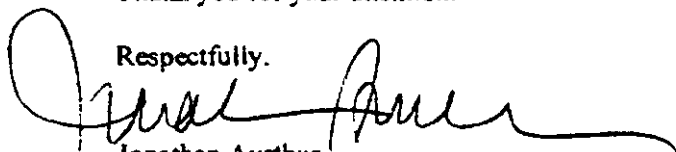
11- 3

The possible liability exposure of the City of LA as well and dangers to persons who may end up living on the Playa Vista site call, I believe, for greater care than would be evidenced by hurried acceptance of the new CLA report. In the words of Hippocrates: First, do no harm.

11- 4

Thank you for your attention.

Respectfully,

  
Jonathan Aurthur

*"The Angel and the Dragon"*

**Comment Letter #12**  
**132 Form Letters with original individual signatures**  
**delivered by Playa Capital Companies, LLC**

For ease of presentation a copy of the form letter is presented  
with original signatures reproduced in a consolidated format.

March 27, 2001

Ms. Barb Garrett  
Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

**RE: City Investigation of Potential Issues of Concern for Community Facilities  
District No. 4, Playa Vista Development Project**

Dear Ms. Garrett:

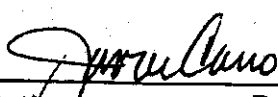
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First, because of the results. As a member of the local community, I am relieved to learn that there is no evidence of a new earthquake fault in our community, that the Gas Company natural gas storage facility is not leaking, that Playa Vista is not subsiding, that the site poses no health risks, and that there are mitigation measures for any methane detected on the site.

Second, as a long-time Playa Vista supporter, I want to see the project move forward. I hope that your Report allows us to put the issues investigated behind us once and for all and that we will finally see the realization of a project that creates community, stimulates economic development, and undertakes the much-needed restoration of the Ballona Wetlands.

Thank you for your consideration.

Sincerely,

 3/27/01  
Signature \_\_\_\_\_ Date \_\_\_\_\_  
JAVIER CANO  
Print Name \_\_\_\_\_  
2417 SEBASTIAN AVE  
Address \_\_\_\_\_  
Redondo Beach CA  
City \_\_\_\_\_ 90278

Comment Letter #12 cont.

March 27, 2001

Ms. Barb Garrett  
Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

**RE: City Investigation of Potential Issues of Concern for Community Facilities  
District No. 4, Playa Vista Development Project**

Dear Ms. Garrett:

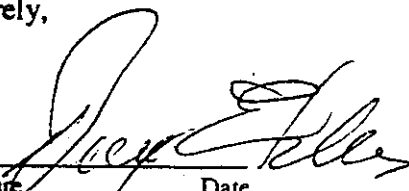
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Thank you for your consideration.

Sincerely,

  
\_\_\_\_\_  
Signature Date  
DOUG EHLERS April 4, 2001  
\_\_\_\_\_  
Print Name  
5527 W. 77th  
\_\_\_\_\_  
Address  
LOS ANGELES, CA 90045  
\_\_\_\_\_  
City



Comment Letter #12 cont

John Andrew Duboch, JR 3/27/01  
 Signature Date  
2232 Lincoln Blvd  
 Print Name  
Venice, CA 90291  
 Address  
 City

Linda Standaart 3/27/01  
 Signature Date  
Linda Standaart  
 Print Name  
13900 Paray Way, SR-311  
 Address  
Marina Del Rey, CA 90291  
 City

A. J. Ciancimino 3/27/01  
 Signature Date  
A. J. CIANCIMINO  
 Print Name  
7355 W. 83rd ST  
 Address  
Los Angeles CA 90045  
 City

J. A. Ciancimino 3-27-01  
 Signature Date  
J. A. Ciancimino  
 Print Name  
7355 W 83rd St.  
 Address  
Westchester 90045  
 City

Nina Gorb 3-27-01  
 Signature Date  
Nina Gorb  
 Print Name  
120 Foxtail Dr.  
 Address  
Santa Monica  
 City 90402

Carlos Ramirez  
 Signature Date  
CARLOS RAMIREZ  
 Print Name  
7550 FLIGHT AVE  
 Address  
L. A., 90045  
 City

Maria Dela Rocha  
 Signature Date  
Maria Dela Rocha  
 Print Name  
5510 Firebrand St  
 Address  
Westchester 90045  
 City

Alex Gorb 3-27-01  
 Signature Date  
ALEX GORBY  
 Print Name  
2904 WASHINGTON PL  
 Address  
Venice  
 City 90291

Patricia Morris 3/27/01  
 Signature Date  
PATRICIA MORRIS  
 Print Name  
5455 W. Century Blvd. E  
 Address  
LOS ANGELES, CA  
 City 90045

Helen S. O'Nieli  
 Signature Date  
Helen S. O'Nieli  
 Print Name  
P.O. Box 10092  
 Address  
Mirina del Rey, CA  
 City 91380

Comment Letter #12 cont.

Marcel Honore 3/27/01  
 Signature Date  
Marcel Honore  
 Print Name  
8355 Manchester  
 Address  
Playa Del Rey 90293  
 City

Thomas Honore  
 Signature Date  
Thomas Honore  
 Print Name  
10822 Molony Rd.  
 Address  
Culver City, CA 90230  
 City

Cedric W. Sutherland 3-27-01  
 Signature Date  
CEDRIC W. SUTHERLAND  
 Print Name  
4161 LINCOLN BLVD  
 Address  
MDL 90292  
 City

Jan Honore 3/27/01  
 Signature Date  
Jan Honore  
 Print Name  
10822 Molony Rd.  
 Address  
Culver City, Ca-9023  
 City

Helfried Falkenberg  
 Signature Date  
HELFRIED FAHPENHAUS 3.26.2001  
 Print Name  
119 Culver Blvd.  
 Address  
Playa del Rey.  
 City

Leonard B. Jackson 3-27-01  
 Signature Date  
Rev. Leonard B. Jackson  
 Print Name  
2270 S. Harvard Blvd.  
 Address  
Los Angeles, CA-90008  
 City

Charles M. Poritzky 3/27/01  
 Signature Date  
CHARLES M. PORITZKY  
 Print Name  
7529 W. 85<sup>th</sup> ST.  
 Address  
PLAYA DEL REY, CA  
 City 90293

Kenneth Jordan 03/27/01  
 Signature Date  
KENNETH JORDAN  
 Print Name  
2210 W. VERNON AVE  
 Address  
L.A. CA 90008  
 City

Michael R. Bauer 3/27/01  
 Signature Date  
MICHAEL R. BAUER  
 Print Name  
10676 ESTERINA WAY  
 Address  
CULVER CITY, CA 90230  
 City

Judith Bauer 3/27/01  
 Signature Date  
JUDITH BAUER  
 Print Name  
10676 ESTERINA WAY  
 Address  
CULVER CITY, CA.  
 City 90230

Charlotte Austen  
Signature Date  
Charlotte Austen  
Print Name  
10820 Blackhawk St  
Address  
Granada Hills, CA 91344  
City

Loi Chaffers 3-27-01  
Signature Date  
Loi Chaffers  
Print Name  
301 Beers St  
Address  
PDR 90293  
City

Miriam Wenger 3/27/01  
Signature Date  
MIRIAM WENGER  
Print Name  
4764 G LA VILLA MARINA  
Address  
MARINA DEL REY, CA 90292  
City

Rowena Ake 3/27/01  
Signature Date  
Rowena Ake  
Print Name  
8409 Lincoln Blvd  
Address  
Westchester  
City CA 90045

Gregory Wenger 3/27/01  
Signature Date  
GREGORY WENGER  
Print Name  
4764 G LA VILLA MARINA  
Address  
MARINA DEL REY, CA 90292  
City

Comment Letter #12 cont.

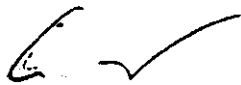
Reke Moore 3/27/01  
Signature Date  
REKE MOORE  
Print Name  
4764-B LA VILLA MARINA  
Address  
MARINA del Rey  
City

Frank M. Guebert March 27,  
Signature Date  
FRANK M. GUEBERT  
Print Name  
4321 Glencoe Avenue  
Address  
Marina del Rey, CA 90292  
City

Marlene Askanas 3/27/01  
Signature Date  
MARLENE ASKANAS  
Print Name  
7361 W. 87 ST  
Address  
L.A. 90045  
City

Shirley Pfeil 3/27/01  
Signature Date  
Shirley Pfeil  
Print Name  
8630 STANMOOR DR  
Address  
Westchester 90045  
City

James Moore 3/27/01  
Signature Date  
JAMES MOORE  
Print Name  
4764-B LA VILLA MARINA  
Address  
MARINA del Rey  
City

  
Signature CARLOS RAMIREZ Date \_\_\_\_\_  
Print Name 7550 FLIGHT AVE  
Address CA CA 90045  
City \_\_\_\_\_

Carol Greenhalgh

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Print Name CARA GREENHALGH  
Address 124 Privateer Mall  
City Marina del Rey, Ca 90292

Winnie Northrup  
Signature \_\_\_\_\_ Date 3-27-01  
Print Name WINNIE NORTHRUP  
Address 7807 EMERSON AVE  
City WEST CHESTER, CA 90045

Christopher K. Cooper  
Signature \_\_\_\_\_ Date 3-27-01  
Print Name CHRISTOPHER K. COOPER  
Address 2534 W. 85TH ST.  
City PLAZA DEL REY, CA

Rod Lyons  
Signature \_\_\_\_\_ Date 3-27-01  
Print Name ROD LYONS  
Address 13851 FISI WAY  
City MARINA DEL REY

Comment Letter #12 cont.

Mary Ellen Cassman  
Signature \_\_\_\_\_ Date 3/27/01  
Print Name Mary Ellen Cassman  
Address 7701 Hasford Ave.  
City Los Angeles CA 90045

Hugo A Francis  
Signature \_\_\_\_\_ Date 3/27/01  
Print Name HUGO A FRANCIS  
Address 7832 Kentwood Ave  
City Westchester CA 90045

Marthe Francis  
Signature \_\_\_\_\_ Date 3/27/01  
Print Name MARTHE FRANCIS  
Address 7832 KENTWOOD AVE  
City WESTCHESTER

John W Nugent  
Signature \_\_\_\_\_ Date 3/27/01  
Print Name JOHN W. NUGENT  
Address 2235 VISTA DEL MAR LN.  
City PLAYA DEL REY

Gwen Vuchsas  
Signature \_\_\_\_\_ Date 3/27/01  
Print Name GWEN VUCHSAS  
Address 7901 MCCONNELL AVE  
City WESTCHESTER, CA 90045

Earl L. Bubbar 4/4/01  
Signature Date  
EARL L. BUBAR  
Print Name  
360 N. ORANGE ST.  
Address  
LA CA. 90036  
City

Norma Bubbar 4/4/01  
Signature Date  
NORMA BUBAR  
Print Name  
360 N. Orange Street  
Address  
Los Angeles, Cal 90036  
City

Monica Trepany 4-4-01  
Signature Date  
MONICA TREPANY  
Print Name  
124 W. WASHINGTON  
Address  
MARINA DEL REY, CA 90292  
City  
MONICA TREPANY

Alice To Sapien 4-4-01  
Signature Date  
ALICE TO SAPIEN  
Print Name  
249 FOWLING STREET  
Address  
RAYA DEL REY  
City  
CALIFORNIA - 90293-7727

Robert E. Sapien 4/4/01  
Signature Date  
ROBERT E. SAPIEN  
Print Name  
249 FOWLING STREET  
Address  
RAYA DEL REY, CA 90293-7727  
City

Comment Letter #12 cont.

Patricia de Felice 4/4/01  
Signature Date  
Patricia de Felice  
Print Name  
8015 S. Sepulveda Blvd  
Address  
Westchester  
City

Jeffrey E. Marshak 4/4/01  
Signature Date  
Jeffrey E. Marshak  
Print Name  
6225 W. 87th St  
Address  
Los Angeles, CA 90045  
City

Rod Tyler 4/4/01  
Signature Date  
ROD TYLER  
Print Name  
524 W. ARABIAN VILLAGE ST.  
Address  
INGLEWOOD, CA 90301  
City

Alex Schuk 4-4-01  
Signature Date  
Alex Schuk  
Print Name  
3670 Mountain View Ave  
Address  
LA CA 90066  
City

Donald Trepany D.C. 4/4/01  
Signature Date  
Donald Trepany D.C.  
Print Name  
Trepany Chiropractic  
Address  
11936 W. Jefferson Blvd., #A  
City  
Culver City, CA 90230

Comment Letter #12 cont.

Lucy Roubal 4/4/2001  
 Signature Date  
Lucy Roubal  
 Print Name  
13228 J Fiji Way  
 Address  
Marina del Rey CA 90292  
 City

Gena Saulsbury 4/4/01  
 Signature Date  
GENA SAULSBURY  
 Print Name  
13600 Marina Point #801  
 Address  
MDR CA 90292  
 City

H.L. Saulsbury  
 Signature Date  
HOLLIS L. SAULSBURY  
 Print Name  
13600 MARINA POINT DR  
 Address  
L.A. CALIF  
 City

WADE PISTAE  
 Signature Date  
WADE PISTAE  
 Print Name  
8227 Redlands St #6  
 Address  
PLaza del Rey CA 90293  
 City

Joan Crone 4.4.01  
 Signature Date  
310-301-0772  
 Print Name  
6505 Esplanade #1  
 Address  
PDIL 90293  
 City

Ross Moen 4-4-01  
 Signature Date  
ROSS MOEN  
 Print Name  
7115 San Marcus St  
 Address  
Paramount  
 City

Ross Moen 3/4/01  
 Signature Date  
ROSS MOEN  
 Print Name  
4707-D LA VILLA MARINA  
 Address  
Marina del Rey, CA 9029.  
 City

Howard B. Drollinger  
 Signature Date  
Howard B. DROLLINGER 4-4-  
 Print Name  
8929 SEPULVEDA BLVD  
 Address  
Westchester, CA 90045  
 City

Sandy Alasta 4-4-  
 Signature Date  
Sandy Alasta  
 Print Name  
16854 Verdura Ave  
 Address  
Paramount  
 City

Arelis Medero  
 Signature Date  
Arelis Medero  
 Print Name  
15133 Perilla #4  
 Address  
Paramount  
 City

Comment Letter #12 cont.

Stanley O. Hirstein 4/4/01  
Signature Date  
Stanley O. Hirstein  
Print Name  
13210 Fiji Way, Unit "G"  
Address  
Marina Del Rey, CA 90292  
City

Eden E. Felus 4.4.01  
Signature Date  
Eden E. Felus  
Print Name  
1400 PALAWAN WAY, #2  
Address  
MARINA DEL REY, CA 90292  
City

Jane E. St John 4/04/01  
Signature Date  
Jane E. St John  
Print Name  
8828 Pershing #310  
Address  
Playa del Rey, CA 90293  
City

Christine Cooper 4.4.01  
Signature Date  
Christine Cooper  
Print Name  
7534 West 85<sup>th</sup> Street  
Address  
Playa del Rey  
City

Kevin Taylor 4-4-01  
Signature Date  
KEVIN TAYLOR  
Print Name  
4706 Lomita St #5  
Address  
LA. CA. 90019  
City

Linda Chen 4/4/01  
Signature Date  
LINDA CHEN  
Print Name  
8137 W Manchester Ave  
Address  
Playa del Rey  
City

Karen Cross 4/4/01  
Signature Date  
Karen Cross  
Print Name  
5626 Sepulveda Bl  
Address  
LA, CA 90045  
City

Lora Mickelson 4/4  
Signature Date  
LORA MICKELSON  
Print Name  
8024 STEWART AVE  
Address  
WESTCHESTER 90045  
City

Hector Marroquin  
Signature  
Hector Marroquin  
Print Name  
10910 CARCH  
Address  
LEANNOX 90304  
City

Tina Hakanen 4-6-01  
Signature Date  
TINA HAKANEN  
Print Name  
8059 CHASE AVE.  
Address  
WESTCHESTER, CA  
City  
90045

Christine Tyne 4/4/01  
Signature Date  
Christine Tyne  
Print Name  
810 E. Grand Ave.  
Address  
El Segundo  
City

Comment Letter #12 cont.

Larry Chaffers  
Signature Date  
Larry Chaffers  
Print Name  
301 Reer St  
Address  
VD R 90297  
City

Dan Sumner 4 April 01  
Signature Date  
DENVER SITANNON  
Print Name  
6515 HEDDING ST  
Address  
LOS ANGELES CA  
City

Doris Ruvelson 3/27/01  
Signature Date  
DORIS RUVELSON  
Print Name  
13521 Bayliss Rd.  
Address  
Los Angeles  
City

Robert S. Ruvelson 3/27/01  
Signature Date  
ROBERT S. RUVELSON  
Print Name  
13521 Bayliss Road  
Address  
Los Angeles  
City

James Hill  
Signature Date  
Jim Hill  
Print Name  
8324 Chase Ave  
Address  
L.A CA 90045  
City

Linda Shafritz  
Signature Date  
Linda Shafritz 3-27-01  
Print Name  
6128 W. 75th place  
Address  
Los Angeles, CA 90045  
City

Sherry Davis 4-3-01  
Signature Date  
Sherry Davis  
Print Name  
7538 W. 23rd street  
Address  
DAUG DRI REY, CA 90293  
City

Mike Arias 4/4/01  
Signature Date  
MIKE ARIAS  
Print Name  
8317 CHASE AVE  
Address  
LA 90045  
City

Nancy W. Nugent 3/27/01  
Signature Date  
NANCY W. NUGENT  
Print Name  
11335 Upstart  
Address  
Shirland Bay, CA 90293  
City



Comment Letter #12 cont.

Lance Lipscomb 3/4/01  
Signature Date  
Lance Lipscomb  
Print Name  
5547 W. Century Blvd  
Address  
LA CA 90045  
City

Aileen Landau  
Signature Date  
AILEEN LANDAU 4/4/01  
Print Name  
8180 MANITOBA ST #204  
Address  
PLAYA DEL REY CA 90293  
City

James A. Collins  
Signature Date  
James A. Collins  
Print Name  
6101 S. Centinela Blvd  
Address  
Culver City, Calif.  
City  
90230

Kristine Shattuck 4/4/01  
Signature Date  
KRISTINE SHATTUCK  
Print Name  
7801 Hindry  
Address  
Los Angeles, CA 90045  
City

Sandra Hunt 4/4/01  
Signature Date  
SANDRA HUNT  
Print Name  
P.O. Box 5877  
Address  
PLAYA DEL REY  
City

(Bill)

William Landau 4-4-01  
Signature Date  
WILLIAM LANDAU  
Print Name  
8180 MANITOBA ST #204  
Address  
PLAYA DEL REY, CA 90293  
City

Elaine A Elder 4-4-01  
Signature Date  
ELISE A ELDER  
Print Name  
8946 SEPULVEDA BL  
Address  
LOS ANGELES CA 90045  
City

Trisha Narduzzi 4/4/01  
Signature Date  
Trisha Narduzzi  
Print Name  
12720 Caswell Ave #203  
Address  
Los Angeles, CA 90046  
City

John Ruhlén 4-4-01  
Signature Date  
JOHN RUHLÉN  
Print Name  
1839 HENEFOR AVE.  
Address  
LOS ANGELES CA 90045  
City

Aurelia Freeman 4/4/01  
Signature Date  
Aurelia Freeman  
Print Name  
3876 Olmsted Ave.  
Address  
L.A. CA 90068  
City

Comment Letter #12 cont.

Tulin Shannon 4/4/01  
 Signature Date  
TULIN SHANNON  
 Print Name  
2641 4th ST. UNIT #1  
 Address  
SANTA MONICA, CA 90405  
 City

Timothy Munier 4/4/2001  
 Signature Date  
Timothy Munier  
 Print Name  
13600 Marina Pointe DR  
 Address #1709  
Marina del Rey CA  
 City 90247

Timothy Shannon 4/4/01  
 Signature Date  
Timothy Shannon  
 Print Name  
27945 Magic Mountain Lane  
 Address  
Santa Clarita Ca.  
 City

D.A. Curtiss  
 Signature Date  
D.A. Curtiss  
 Print Name  
7880 Vicksburg Ave  
 Address  
Westchester 90045  
 City

David D. Fu  
 Signature Date  
DAVID D. FU  
 Print Name  
6720 Lincoln BL #330  
 Address  
Marina del Rey, Ca 90292  
 City

Ellen K. D. 7/3/01  
 Signature Date  
Ellen K. D.  
 Print Name  
13428 Marilla #345  
 Address  
Marina del Rey, CA

Gloria H. Prado 4/4/01  
 Signature Date  
GLORIA H. PRADO  
 Print Name  
4934 S. SEASIDE AVE  
 Address  
Culver City CA 90230  
 City

Bob Cassman - 4/4/01  
 Signature Date  
BOB CASSMAN  
 Print Name  
14016 BORA BORA # 223  
 Address  
MARINA DEL REY, CA.  
 City 90292.

Michael E. Hill 4.3.01  
 Signature Date  
MICHAEL E. HILL  
 Print Name  
4110 PELAND CT.  
 Address  
SANTA MONICA  
 City

Willie A. Hjorth 3/27/01  
 Signature Date  
WILLIE A. HJORTH  
 Print Name  
P.O. Box 9104  
 Address  
Marina del Rey, CA 90295  
 City

Comment Letter #12 cont.

4/4/2001  
 Signature PATRICIA O'NEILL Date  
 Print Name  
3868 EAST BLVD  
 Address  
LOS ANGELES CA 90066  
 City

4/5/01  
 Signature HOWARD POLLACK Date  
 Print Name  
4206 TIVOLI AVE  
 Address  
LIA 90066  
 City

3-4-01  
 Signature IMAX BUSH Date  
 Print Name  
3811 OCEAN FRONT WALK  
 Address  
MARINA DEL REY CA 90292  
 City

4-4-01  
 Signature TOM RYAN Date  
 Print Name  
515 MILDA'S DR.  
 Address  
MALIBU  
 City

Diane Bush  
 Signature DIANE BUSH Date  
 Print Name  
3811 OCEAN FRONT WALK  
 Address  
MARINA DEL REY  
 City

4/5/01  
 Signature Robert G. Morris Date  
 Print Name  
21 GRANT ST.  
 Address  
MDR 90292  
 City

4/4/2001  
 Signature CHRISTOPHER McDOWELL Date  
 Print Name  
5855 Green Valley #111  
 Address  
Culver City, CA 90230  
 City

4/5/01  
 Signature Rosalie Gerhart Date  
 Print Name  
13219A Fiji Way  
 Address  
MARINA DEL REY  
 City

4-4-01  
 Signature J.B. GRANER Date  
 Print Name  
4000 PACIFIC AVE., #303  
 Address  
MARINA DEL REY, CA 90292  
 City

4/4/01  
 Signature PETER N. PATMAN Date  
 Print Name  
5415 VIA DONATE  
 Address  
MARINA DEL REY CA  
 City 90292

Comment Letter #12 cont.

Ann Post 4/4/01  
 Signature Date  
ANN POST  
 Print Name  
5900 CANTERBURY DR. B116  
 Address  
CULVER CITY, 90230  
 City

Jack Topal 4-4-01  
 Signature Date  
JACK TOPAL  
 Print Name  
8200 CALABAR AVE.  
 Address  
PLAYA DEL REY  
 City

Rae Lamothe 4/4/01  
 Signature Date  
Rae Lamothe  
 Print Name  
1301 Vista del Mar A-10  
 Address  
Playa del Rey CA 90293  
 City

Doris Lincaphen 4/4/01  
 Signature Date  
DORIS LINCAPHEN  
 Print Name  
8216 TUSCANY AVE  
 Address  
PLAYA DEL REY  
 City  
 90293

Stephen Knight 8/27/01  
 Signature Date  
STEPHEN KNIGHT  
 Print Name  
12816 SHORT AV.  
 Address  
L.A. 90066  
 City

Steven J. Rose 4/4/01  
 Signature Date  
STEVEN J ROSE  
 Print Name  
4316 KEYSSTONE AVE  
 Address  
CULVER CITY  
 City

Jack Topal  
 Signature Date  
Jack Topal  
 Print Name  
8200 Calabar Ave.  
 Address  
Playa del Rey  
 City

Seymour Kaitin 4/4/01  
 Signature Date  
SEYMOUR KAITIN  
 Print Name  
213 TOWLING ST.  
 Address  
PDR, CA 90293  
 City  
 310-306-8301

George R. Swartz 4-4-01  
 Signature Date  
GEORGE R. SWARTZ  
 Print Name  
2203 MARIAN PL  
 Address  
VENICE, Ca 90291  
 City

Donna K. Swartz  
 4/4/01  
 DONNA K. SWARTZ  
 2203 MARIAN PLACE  
 VENICE, CA 90291

Comment Letter #12 cont

[Signature] 3/27/01  
 Signature Date  
Celia Knight  
 Print Name  
12820 Short Ave.  
 Address  
Los Angeles CA 9006  
 City

[Signature] 3-27-01  
 Signature Date  
JAMES RAJAR  
 Print Name  
725 S SPRING #12  
 Address  
LA, CA 90014  
 City

[Signature] 3/27/01  
 Signature Date  
Charlotte DeMeo  
 Print Name  
11816 Junette St.  
 Address  
Culver City, CA 90230  
 City

[Signature] 3-27-01  
 Signature Date  
John C. Sanchez  
 Print Name  
4505 Detroit #3  
 Address  
LA CA 90036  
 City

[Signature] 3/27/01  
 Signature Date  
Barbara Musella  
 Print Name  
6383 W 80th St  
 Address  
Los Angeles, Ca  
 City  
90045

[Signature] 3-27-01  
 Signature Date  
Richard S. Musella  
 Print Name  
6383 W 80th St  
 Address  
Los Angeles 90045  
 City

[Signature] 3-27-01  
 Signature Date  
Challis Macpherson  
 Print Name  
738 Howard  
 Address  
Venice  
 City

90292-5514

[Signature] 4/5/01

Rabbi Michael S. Beals  
 Signature Date  
7700 Denrock Ave.  
 Print Name  
 Address  
Westchester 90845  
 City

B'nai Tikvah  
 Congregation

[Signature] 3/27/01  
 Signature Date  
MARY BALLOU RICHERT  
 Print Name  
2000 VANDERBILT LANE #22  
 Address  
REDONDO BEACH, CA 90870  
 City

4-13-2001 4:20PM FROM RUN WOLF 310 453 4660

**CLA March 2001 City Investigation of Potential Issues of Concern CFD4 Playa Vista  
Public Review - Stewart Morris**

**Comment Letter #13**

Stewart Morris  
23531 Leyte Drive  
Torrance, CA 90505  
(310) 375-7945

April 9, 2001

Barb Garrett  
Legislative Analyst  
City of Los Angeles  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

By fax: (213) 680-0085

**Re: Public Review Comments  
City Investigation of Potential Issues of Concern for CFD4 Playa Vista Development Project**

Overview:

I do not agree that this report fulfills the requirements of the Budget & Finance Committee as determined at the June 7, 2000 meeting presided by Councilmember/Committee Chair Mike Feuer and Councilmember/Committee Member Cindy Miscikowski.

Much of what I read dissuaded me from any conclusion that the intention of this report was to bring truth to light. If that were really the committee's intention, there would have been at least some requests for more information from experts in the affected communities who were not specifically part of the committee. Even more telling, is that the July 18 public hearing comments transcripts were not included in the volumes of documentation added to the Study. Instead the Study committee chose to work in a vacuum from the communities that generated the request for the study in the first place.

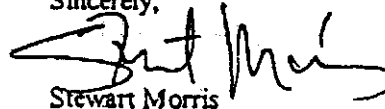
Caveat:

As a member of the public with limited time, resources and access to public officials, please excuse any mistakes I may have made, but please inform me.

Please note that I have additional concerns about specific technical issues, beyond the one's I addressed, but I'll leave those for others with more informed opinions.

Thank you for the opportunity to present my concerns.

Sincerely,

  
Stewart Morris

Attachment: Stewart Morris/Public Review Comments

13- 1

Comment Letter #13 cor

CLA March 2001 City Investigation of Potential Issues of Concern CFD4 Playa Vista  
Public Review - Stewart Morris

1. The CLA report did not account for all the relevant public comments/evidence presented July 18.

After the July 18 public comments meeting the CLA apparently never formally or informally reported which public comments they considered relevant and how those would alter the proposed study plan. One can only assume that (a.) public comment was not formally considered and/or related discussions were not memorialized, (b.) if they were considered, there was no public record that they were presented to Councilmember Feuer for approval, which means that (c.) therefore the final CLA Study plan was never approved by those who engaged it in the first place.

13- 2

Nor could I find evidence of any meetings offered between the Study Members and the members of the public who presented technical evidence at the July 18 meeting, as requested by Councilmember Feuer.

13- 3

By reviewing transcripts from the June 7 meeting that initiated the study and the July 18 public hearing that solicited input, compared to the final March 2001 CLA report, one finds the following...

This study was instigated by the apparently strong public reaction to disagreements regarding public safety issues presented to the Council by the proponents of the Playa Vista project re solicitation of Mello-Roos funding. Councilmembers Feuer and Miscikowski requested the CLA Study be performed to ascertain the accurate data needed to make an informed decision regarding bond funding. The CLA Study was to be done as an open, impartial investigation of scientific evidence.

13- 4

The CLA report makes no mention of any public involvement other than the June 7 and July 18 public hearings. In fact, the last public involvement, at the 7/18 hearing, was clearly defined by Gerry Miller ACLA, who ran the meeting, as not a forum for any discussion and only a source of input re the draft CLA study. (publicly announced only one week prior, but not published in the primary local newspaper, The Argonaut.)

At the June 7 meeting, Councilmember Feuer made specific requests regarding public involvement...

"I think there should be a meeting, a public meeting, for people to be able to say what they think of the outcome of that determination. 'Here's what we think we ought to be studying.' 'Public, what do you think?' 'Is it too extensive?' 'Is it too narrow?' 'What's there?'"

"And then, informed by that public meeting, City staff then proceed to prepare a report with input from City staff experts and any other experts whom they deem appropriate from outside consultants and the like." Then they come back within a specified timeframe."

"... So, it's... What do we study and by when? Public, what do you think of that? Give what you think of that."

"...that COA report and consultation with that team results in a report that further analyzes, among other things, the issues raised in the peer review report submitted by Dr. Jones and includes, but is not limited to ..."

"And the CLA shall consider any other evidence that it gets including evidence presented to this committee."

"...the process is, "What are the issues: public discussion".

"I believe that the task force can help us get to a greater depth of that kind of specific analysis if it's done in a public forum and not behind closed door so that the public has the ability to exchange, involve and provide expertise as well."

"... the bottom line issues are how do we get to the best possible extent real information ... addresses the outstanding issues ... allows for meaningful public input and enables us as decision makers to feel confident that we have the universe of relevant information from public people, from consultants, from City staff to make a decision."

13- 5

## CLA March 2001 City Investigation of Potential Issues of Concern CFD4 Playa Vista Public Review - Stewart Morris

"... to pull together the information to create public process, to receive public documents from the public which help to inform the decision and help distill the decision, to let this process begin as a recommendation as best as possible..."

"... there would be an opportunity for a well-noticed public meeting at which to discuss, at that early stage, the array of issues to be considered and the time frame within which the report be prepared, to be followed by the actual preparation of the report ... I am very cognizant of the frustration of some on all sides here who felt they would have liked more time to discuss the substantive issues. There will be plenty of opportunity for that discussion."

13- 5 co

2. The CLA report did not appear to include input from Dr. Jones, as explicitly requested by Councilmember Feuer (other than for peer review after tests were concluded).

The CLA report notes that Dr. Jones was asked to review specific reported conclusions, but does not describe his integration into the overall project process as explicitly requested by Councilmember Feuer.

There is an apparent double standard here. If the Study (p.23) describes his initial report as void because it was based on an outdated (1935) and inaccurate study, then why was he still considered a reliable peer-reviewer? Even a cursory review of that report would have determined any credibility problem well before July 18 (where it could have been presented to the public in the Study proposal.) And, what was unique about his participation, or lack of participation, that caused his name to be missing from the list of Consultants and Contracting Agencies? What occurred?

Is something unusual occurred here, is there an issue to consider if it's also determined that he's the first and only consultant ever hired by Playa Vista (to report on a query from the City) who responded with findings contrary to the interests of the Developer?

13- 6

At the June 7 meeting, Councilmember Miscikowski said...

"What we really need is some entity that is our City agents who get the peer review testimony and those who are not on either side of promoting an issue or recommending a statement, but someone who knows the language, knows the system, knows the kind of questions that you and I don't know how to ask..."

"...we need a task force for those contradictions and conflicts and others are going to be brought forward can be aired it can be resolved, can create a group of City agents who have some degree of technical knowledge and outside that the City will hire to help them clear the issue."

At the June 7 meeting, Councilmember Feuer said...

"Dr. Jones ... needs to be part of that team because he's the peer review who's been in this. And, if I didn't say that explicitly, I wanted to be clear about it now."

3. The report does not document how the specific consultants were selected and what their existing or prior relationships to the Playa Vista project are/were.

During the June 7 meeting a question was raised regarding the potential conflict of interest resulting from the Gas Company and Playa Vista developers employing the same law firm... that is, how the two parties can have the same legal representation, even though they pursue apparently conflicting interests.

That unanswered question points to a related missing logic in the Study. The Study reviews potential Gas Company liability (methane leaks) determined, in part, by consultants employed by the Developer, who has the same incentive to find no leaks.

13- 7

At the June 7 meeting, a member of the public (Venskus) asked ...

"...perhaps look into and investigate the potential conflict of interest with Latham & Watkins representing both Southern California Gas and Playa Vista ...



## CLA March 2001 City Investigation of Potential Issues of Concern CFD4 Playa Vista Public Review - Stewart Morris

### 4. The report does not make any specific comparisons to the conclusions reached prior to permitting and construction of Belmont.

During the public hearings, there was concern shown regarding the fact that similar safety studies were completed, and approved as safe, before Belmont was constructed, yet it now stands abandoned as unsafe. How are those concerns addressed here? This is not a comparison of safety issues, but of the credibility of the studies due to lack of response to public input and lack of accountabilities to non-vested parties.

13-

### 5. Technical concerns.

The CLA report notes methane mitigation

Re venting. The report says that the actual number of vents is not determined yet. How can the City consider issuing bonds for a property development mitigation technology that is not fully defined?

13- 9

Re "active" venting. The report notes that Level III and some Level II concentration levels will require "active" mechanical ventilation systems.

13- 1

1. Where will the energy be supplied from and how will they source redundant/emergency power in the case of an earthquake or other catastrophic event? Is the State of California willing to approve special permit to exempt the project from electricity brownouts.
2. How will the ambient noise and additional expense be considered in the sale price of homes? Will that be reflected in the Development's updated financial pro-forma?
3. If an audible and visual alarms and notification to LAFD are triggered when methane concentrations are detected above 12,500 ppmv, what occurs next? If a significant concentration is detected, who is liable for the evacuation costs, who is liable for the mitigation costs to determine the cause and re-route the gas?

13- 1

13- 1

Re Monitoring. The report notes that manual assessments and monitoring will be required and the building owner or property owners association will be responsible for it's upkeep.

13- 1

1. Who is accountable for ensuring that sites requiring monitoring are in fact monitored?
2. What protection will the community have regarding compliance of the monitoring?
3. What examples of non-compliance did the Study review to determine that the plan to monitor is typically enforced, and who will be responsible for that enforcement at PV? (Opinion: Property owners associations are not typically associated with reliable, consistent actions and accountability.)
4. How will the disruption and additional expenses related to monitoring be considered in the sale price of homes? ? Will that be reflected in the Development's updated financial pro-forma?

13- 1

### 6. Subsidence.

The Study reviewed historical data to determine evidence of existing ground subsidence. It did not appear to review how adding millions of tons of property development, automobiles and people on a porous, historical wetland will effect the potential for future soil compaction and subsidence.

13- 1

If the property is situated on a significant aquifer, and the water (and gas) are diverted, what will occur as a result?

### 7. Input from all Study committee members.

The July 11 CLA report proposal and the completed March 2001 report note the Los Angeles Fire

**CLA March 2001 City Investigation of Potential Issues of Concern CFD4 Playa Vista  
Public Review - Stewart Morris**

Department as a member of the Study committee. However, I did not see any commentary from LAFD in the report.

1. What was LAFD's participation?
2. Where is the documentation re their participation?

13- 16

**8. Post Study actions.**

What are the next steps regarding the result of this public comment?

1. How will the Study members assimilate this comment into their report to the PLUM committee?
2. How much notice will the public receive before the PLUM committee meets to review this?
3. How will the public be notified?

13- 17

Comment Letter #14

Barb Garrett, Legislative Analyst  
City of Los Angeles  
Fax 213-680-0085

April 9, 2001

In Regard to the City Investigation of Potential Issues of Concern for Community Facilities District No. 4 Playa Vista Development Project: (Report March, 2001)

I am writing to express several concerns:

On two consecutive days, March 14 and 15, 2001, I was on the northwest corner of Lincoln and Jefferson Blvds., where there is a bus-stop. On both afternoons, around 4 pm, I noticed that the air had a slight smell and after about 15 minutes or so, I began to feel a headache and the back of my throat began to feel sore. The smell of the gas vapor seemed to be coming from the large opening under the recently resurfaced curb. After I left the area, my headache disappeared, so I believe that it was caused by breathing whatever gas was escaping in that area. At least two other people in the vicinity had a similar experience at that time.

14- 1

I am concerned that the Playa Vista construction underway across Lincoln Blvd., (the Fountain Park Apts) may be causing gases to vent in adjacent areas, and that in fact the mitigations currently being tested are not sufficient. That area has one of the highest concentrations of methane gas according to your study map. Why is building going on while the mitigation system is still in the process of being designed? (pg 15 & Appendix B))

14- 2

A thorough study of the old underlying oilfield and its 200 wells has not been done; moreover, as I understand it, such land could be very dangerous to build upon. On April 3, 2001, the Manhattan Beach Chamber of Commerce sponsored an educational session on methane gas with their Fire Chief which brought up some of these issues.

14- 3

Because of the liability the City of Los Angeles will face if significant problems develop in the future, adequate disclosure of the extent of the extremely high gas hazards must be made in all of the real estate transactions having to do with the proposed Playa Vista development. Who bears the liability and considerable expense for the ongoing methane monitoring for the "affordable" housing units?

14- 4

In terms of public input, I think that more could have been done to include the public in this process. I did go to the Venice Library to read the additional materials, but could not find them. Also, one of the important factors expressed by the public at the July "scoping" session was that independent consultants should be used. Yet, according to the CLA report, seven of the nine entities involved were hired by Playa Vista.

14- 5

In relation to the health risk assessment, I also have not seen an adequate response to the reported cancer cluster in the Bluffs area above Playa Vista, and the considerable increase in air pollution that would be due to the large increase in traffic in the area.

14- 6

Finally, I believe that a Subsequent Environmental Impact Report (SEIR) that would cover the entire Playa Vista site and project should be done to adequately address these concerns.

14- 7

Sincerely,

Leslie Purcell  
1033 12<sup>th</sup> St., #306  
Santa Monica CA 90403

## Comment Letter #15

Attn.

Barb Garrett  
Legislative Analyst  
City of Los Angeles

Re: Playa Vista  
Development  
Project

\* Re: Problems with isotope  
data & scientific report  
after peer review...

## Comment Letter #15 cont.

I read the review posted by the city on the internet. I was surprised by a few aspects of the web based report. Some of the inconsistencies were missing figures and values, which, as a scientist, bother me. Of course, my background is academics. Geological evidence in terms of environmental consulting should maintain a central theme, that being: risk assessment. As such, I have read the report regarding the Playa Vista development project. It is my opinion that the conclusions reported by the City of Los Angeles are flawed in terms of interpretation regarding source material of methane. I will

One issue of large concern for me is this report does not approach any explanation as to how the methane gas is so different from storage gas. The city report states that methane derived from the subsurface soil is a combination of both thermogenic and biological sources. When I looked at the carbon-deuterium profile, this did indeed appear to be the case, however, the methane picture is not as simplistic as presented in the City of Los Angeles report. Biological alteration of methane occurs by methanogenic bacteria in a lot of natural systems. Bacteria can alter the isotopic signature of methane. Also, the pathway and residence time of gas underground can lead to fractionation of thermogenic methane, as appeared to be the case here. Drawing a conclusion that the methane  $\delta^{13}\text{C}$  signature somehow excludes the Playa Vista underground gas storage without any sort of statistical relationship facility is therefore scientifically irresponsible.

Any conclusion for a scientist must be backed up statistically, otherwise conclusions are reduced to conjecture, opening up the party in question to counterproductive peer review and even possible litigation, as may be the case here. Methane experts are aware of the highly complex cycling of methane. As such, we must know how our representative data compare statistically before attempting any inference in terms of source or pathway, as was done in the City of Los Angeles report. No explanation of alternative  $\delta^{13}\text{C}$  pathways, methanogenesis or oxidation has been presented here. As such, I find this portion of the report highly disturbing as a scientist. It was and fast with a lot of hand waving.

In retrospect, the largest problems I found in this report was that it was overall, not scientifically concise, poorly written and the conclusions regarding the biogeochemical pathways were unfounded. This report, if submitted to an academic journal would fail the test of peer review and objectivity so critical to scientific discourse. The biogeochemical characterization of your site is contrary to any other estuarine system I have yet reviewed. In addition, the presence of heavy hydrocarbons, complex LNAPLs such as BTEX, as with a  $\delta^{13}\text{C}$  signature statistically similar to gas retained by natural gas companies, per the data released in the ETI report.

## Comment Letter #15 cont.

## SYNOPSIS

## INADEQUACIES OF CITY OF LOS ANGELES REPORT FROM A SCIENTIFIC PERSPECTIVE

1.) To date: No surface methane flux has been reported, only subsoil, and that, limited in spatial extent. Total methane fluxes out of soil are well over the minimum explosive limit.

15-2

2.) No statistical analysis of the  $\delta^{13}\text{C}$  data has been done in terms of analyzing the distribution of your isotopic data. This is important because we can elucidate the physical mechanisms behind  $^{13}\text{C}$  pathways in the environment as well as THERE RELATIVE SOURCE CONTRIBUTIONS.

15-3

3.) The evidence for a fault near Lincoln Blvd. may be inconclusive due to extensive modification of the surface sediment during development. The seismic profile does not exclude the fault's existence. Inference that the Lincoln fault does not exist is contrary to the spatial methane concentration for areas currently in development.

15-4

4.) Several biogeochemists in our department were very surprised at the existence of subsurface paraffin hydrocarbons, typically associated with petroleum products. This is very unlike any estuarine system we have seen to date in the literature. This does not preclude the possibility of a natural source, however, such a natural source does seem very unlikely. Only further  $\delta^{13}\text{C}$  analysis of methane from this locality will elucidate the possible methane source and strength.

15-5

I am at a loss to explain the extremely high concentrations of methane adjacent to Lincoln Blvd. however, the distribution pattern is non-random and not a sort of distribution we would expect to see for a biological system. It is possible that this distribution may be associated with subsurface venting of methane, similar to that seen in Hancock Park. Joints or cracks in the subsurface can lead to preferred outgassing pathways. Natural seeps are by and large methane, and  $\text{CO}_2$ , not heavy paraffin.

5.) Overall I felt the EII report was very solid in terms of methodology, but the LA City report neglects a balanced discussion of this topic. The citation by the consulting firm regarding  $^{13}\text{C}$  fractionation of methane was a direct quotation of a well known geochemical methane study (Reeburg et al., 1997), however, no attempt to cite, or even quote that author strikes me as irresponsible.

15-6

6.) The coverage of methane concentration data is heavily biased to the region adjacent to Lincoln Blvd. The full range of methane is not determined, spatially or isotopically. Furthermore, the data regarding methane concentration is remarkable for its nonrandom distribution, consistent with preferential venting of natural gas to the surface via fault line structures. Such preferred routes of gas emissions should be noted where the rates of methane escaping the ground are inline with advective processes, not diffusional gas transport processes as would be expected in any subsoil biological system or even the diffusion of thermogenic methane across the soil/atmosphere interface.

15-7

## Comment Letter #15 cont.

7.) Finally, the remark that the Playa Vista underground storage facility is not leaking seems unfounded. Most underground gas storage facilities (upwards of \$70-\$80) at modern gas stations, do in fact leak. The presence of paraffin hydrocarbons at the Playa Vista site may be consistent with such a source. BTEX found in the ETI report cannot be produced by biological means and merits further investigation.

15-8

**\*\*FINAL CONCLUSION\*\*\***

While the environmental impact studies initially performed by ETI appear to be well composed and balanced, the City of Los Angeles study is incomplete, poorly written, citation, lacking data evidence and does not hold up to third party inquiry. Scientific conclusions presented in this study are unbalanced, and no strong scientific conclusion can be drawn, from a geogichemical standpoint, until statistical analysis is. Representation of the full picture of isotopic fractionation is not presented in this report. I saw no evidence to support Play Vista's conclusions that methane was not derived from gas storage facilities. On a first past, in fact, I was very surprised by the isotopic similarities. I will plot and analyze these data and contact you. I am submitting a reference biblio graphy for your use. In conclusion, I feel that the geological report by ETI was misconstrued, and that the developers are placing themselves in a position setting a precedence of present and future risk of financial liability in terms of further development at this site.

15-9

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## Comment Letter #15 cont.

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# Wetlands Action Network

*protecting & restoring wetlands along the Pacific Migratory Pathways*

April 9, 2001

sent via facsimile to: (213) 680-0085

AND to: (213) 485-8983

Ms. Barb Garrett, Legislative Analyst

City of Los Angeles

200 No. Main Street, Room 512

Los Angeles, CA 90012

**THESE COMMENT ARE ALSO SUBMITTED ON BEHALF OF SIERRA CLUB**

re: City Investigation of Potential Issues of Concern for Community Facilities District No. 4 Playa Vista Development Project - Prepared by the City of L.A. Office of the Chief Legislative Analyst, March, 2001 (BALLONA WETLANDS)

Dear Ms. Garrett:

Thank you for the opportunity to comment on the above-mentioned report, as well as the process as originally outlined and dictated by the Los Angeles City Council Budget & Finance Committee and also the comments raised at the July 18th public scoping hearing on this process. We respectfully request that a full Subsequent Environmental Impact Report (SEIR) is required for this process to be legally valid under the California Environmental Quality Act (CEQA.) As stated by the City's consultant in the 6/7/00 Budget & Finance Committee hearing, "the initially EIR that was done on the project was not adequate in addressing methane." By law, a subsequent EIR is now required to be completed.

**I. Process A. Scope of review:** The title for this report is mis-guided, at best. The City Council Budget & Finance Committee directed the CLA's office to determine what problems related to methane gas and other potential public health and safety hazards, as well as potential city liability concerns related to the entire 1,087 acre Ballona Wetlands ecosystem/proposed Playa Vista site, not only the Mello-Roos District No. 4, as the title for this report suggests. The broader scope of review was made very clear to City staff at the 6/7/00 hearing after Dr. Victor Jones of Exploration Technologies, Inc., the City's peer reviewer explained to the Budget & Finance Committee members that "the same procedure has to be followed over the entire structure, the entire acreage of 1,087 acres." 16.

Dr. Jones also explained that "Once the construction starts, the ability to map the natural seepage and relate it to the natural sources has been reduced. If we're going to build on this area, then it's very important that it be mapped properly before we cover it up."

Of course, the City has ignored this admonition of Dr. Jones' as they have allowed Playa Vista Capital to bulldoze, grade, stockpile atop and otherwise "cover up" the land throughout Areas D and in the location of the proposed polluted runoff basin in Area B, while proper mapping and studies have not been completed. What rationale does the City have for ignoring the advice of this expert? 16.

**B. Not an independent analysis:** Seven of the nine consultants listed on page iii were hired by the "Contracting Agency" of "Playa Vista Capital." The remaining two were contracted by the City of Los Angeles.

1) when did the private Wall Street-backed, Morgan Stanley Dean Witter/Goldman Sachs owned Playa Vista Capital become an "agency?" They have not yet received sufficient public financing to be termed an agency, but perhaps if the City provides them with the nearly \$1/2 billion they want in public financing, that will be sufficient for them to be deemed a public "agency." 16.

Ballona Wetlands CLA Report comments  
April 9, 2001

## Comment Letter #16 cont.

2) It was made abundantly clear in the 6/7/00 City of Los Angeles Budget & Finance Committee meeting that Playa Vista Capital was not to contract the consultants, but that these consultants were to be independent. The City Council motion authorized the CLA's office to hire consultants for this project, not to analyze work of consultants performed under the supervision of Playa Vista Capital.

Cindy Miscikowski stated on 6/7/00: "what we really need is some entity that is our City agents who get the peer review testimony and those who are not on either side of promoting an issue or recommending a statement but someone who knows the language, know the system, knows the kind of questions that you and I don't know how to ask..."

Mike Feuer stated on 6/7/00 that "Many of our processes in the City including building permit processes rely in the first instance on what the project proponent submits and I think, while that information is relevant, it cannot be deemed as dispositive nor the only baseline set of data." He also said, "...the one thing that you just said that I would not recommend it that is be - that whatever group of people is assembled, analyzes the reports prepared by Playa Vista's experts alone. That is not the charge."

Cindy Miscikowski stated on 6/7/00 also: "...in fact in this instance, I think why we're here is what the City's first effort of review through Building & Safety required was to go outside to get expertise and hire this peer reviewer, Dr. Jones, with whom now the applicant has some issues that they agree and some issues that they are in dispute."

Mike Feuer stated on 6/7/00 also: "The goal is to have information that reflects real life and if that includes people saying adamantly this is wrong and that's right, that's okay....I do contemplate that the CLA's report derived from the consultation with all these folks will include consultation with experts - that are outside - expert consultants that are outside of the City family and draws on both because there've been a lot of discussions - you know, again to be very candid about it, in this committee about who knows what's going on and who is capable - who is and who isn't capable of coming up with the right answer...it is imperative...that the information that's brought forward is viewed at least by everybody as being credible information with the analysis being thought to be thorough and to the point....The public needs to be confident and we need to be confident in that process.."

What has the CLA neglected these admonitions and instructions by the Council leader who initially requested this process be undertaken?

### C. Flawed process:

1) The CLA obviously did not analyze all other evidence as submitted by Wetlands Action Network, Lawyers for Clean Water, Santa Monica Baykeeper, Sierra Club and Ballona Wetlands Land Trust during the hearings of the Building & Safety Commission last summer, after the CLA process was begun. At the 6/7/00 B&F hearing it was directed that "the CLA shall consider any other evidence that is gets including evidence presented to this committee." Given that the Building & Safety Dept. head was to be part of this CLA committee, it would be presumed that all evidence in the hands of this department and other departments participating in this process should be analyzed. Instead, it is rather obvious that only the Playa Vista consultant-submitted reports have been analyzed.

## Comment Letter #16 cont.

Ballona Wetlands CLA Report comments  
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3

2) Dr. Victor Jones was to be part of the CLA review committee. As far as we can tell, he was never invited to nor allowed to participate in these closed-door meetings. He only participated in meetings with staff of the Building & Safety Dept., which was not the direction given by Budget & Finance Committee Chair Mike Feuer. Councilmember Feuer specifically stated on 6/7/00, "Mr. Jones - Dr. Jones, excuse me, needs to be part of that team because he's the peer reviewer who've been in this. And, if I didn't say that explicitly, I wanted to be clear about that now."

Councilmember Feuer did not simply direct that Dr. Jones be a consultant, but rather that he be "part of the team" the CLA Task Force that produced this report. He was not. Why? 16-

3) Raymond Chan suggested at the 6/7/00 B&F hearing that the City's Department of Environmental Affairs, having expertise in some of the technical issues related to public health & safety, as well as the Personnel Dept. of Industrial Hygiene, be brought into the process. Why were these recommendations ignored in favor of the Playa Vista consultants being those who brought forward baseline data and analysis? 16-

4) Cindy Miscikowski recommended that the Fire Department should be part of the CLA committee on 6/7/00. Why was this recommendation not followed? 16-

5) At the 6/7/00 B&F hearing Gordon Hamilton of the City's Planning Dept. mentioned the discrepancies between a 1998 and 1999 report related to hydrogen sulfide. Since then field notes from various Playa Vista contractors have been submitted into the record addressing hydrogen sulfide, and other documentation has been found in the City records related to employee exposures to hydrogen sulfide on the site, yet the CLA report dismisses any problem related to hydrogen sulfide. 16

At the this June, 2000 hearing, Councilmember Feuer stated that he wanted to be sure that all reports were analyzed by the CLA task force - "including reports that contradict one another - are both available to those who wish to analyze this and available to members of the public unless there's an exception to the public records act to which I'm unaware of at this moment...if there are specific issues, I want them resolved." There is no indication in the CLA report that these other hydrogen sulfide reports have been taken into account nor how these reports were reconciled with the likely biased reports submitted by Playa Vista consultants.

6) Please explain what role Latham & Watkins, the lawyers for BOTH Playa Vista Capital and Southern California Gas Company, played in the production of this report. We have heard that many documents sought between the various consultants and the City were considered privileged and confidential/attorney work-products, and, thus, were only able to be partially analyzed. ON 6/7/00 at the B&F hearing Ms. Sabrina Venskus raised the issue of the possible conflict of interest of Latham & Watkins representing both of Playa Vista Capital and Southern CA Gas Co./Semptra. What did the City do to insure that the data relating to whether or not the gas field gases are migrating was accurate and independent data and not a product that would protect one of the other of Latham's clients to the possible exclusion of the City and the public? 16-

7) Councilmembers Mike Feuer and Cindy Miscikowski on 6/7/00 at the B&F hearing both requested that the City's Engineering Geology Advisory Committee be part of the CLA process. There is no indication that such body did participate in preparation or review of the CLA report. Why? 16-

8) Councilmember Mike Feuer on 6/7/00 at the B&F hearing stated that there would be plenty of time for public review and input into this process, and that the entire process would be open to the public. Please inform the public as to the meeting dates and times of the CLA Task Force and whether or not these meetings were properly noticed to the public. 16-

Ballona Wetlands CLA Report comments  
April 9, 2001

## Comment Letter #16 cont.

or even open to the public. Why were Wetlands Action Network and Sierra Club not invited to these meetings to participate in this process? Were the developers, their consultants, lobbyists and/or their lawyers involved in any of these meetings? Please inform the public as to who was present at each meeting related to the preparation of the CIA report.

### II. Substantive Issues A. Fractures in the Earth that facilitate gas seepage:

While the CLA report states that there are no earthquake faults, and, thus no problems as previously thought related to this issue, the CLA fails to thoroughly and properly analyze this situation and the potential hazards and City liabilities related to this issue. At the 6/7/00 B&F hearing, Dr. Jones talked about "fractures" that could serve to help collect methane gases. In his January 31, 2001, letter to Dr. David Hsu, Dr. Jones does not unequivocally state that there is no fault, but merely that "interpretation of the chemical and geophysical data does not support the existence of the Lincoln Blvd. fault that was postulated to dip westward and possibly transect strata within the existing gas storage field, as communicated in our April 17, 2000 report to LADBS. This combined geochemical and geophysical information supports that the methane gas seepage observed on the Playa Vista site does not come from the Southern California Gas Storage Field."

All that Dr. Jones is apparently saying is that the presumed fault does not appear to be connected to the Southern California Gas Company storage field. In this January 31, 2001 letter, while he abstains from using the word "fault" he still uses the term "fractures." He states, "Thus the near-surface gas anomalies appear to be issuing from fractures or other disruptions that directly underlie the methane anomalies as defined by the soil gas surveys."

These fractures - as explained by Dr. Jones in his April 10, 2000, report, can facilitate gas seepage to the surface. At the 6/7/00 B & F hearing, he stated, in explaining how earthquake and other ground movements could change gas explosion hazards, that "it means that the gas seepage here that we mapped today might be an ordered magnitude or more - greater in the morning than it is tonight. And that means that we have to be very careful in what mitigation is proposed to make sure that the design is capable of handling all the variations that nature might put upon it."

The CLA report fails to deal with the very real, and obviously still existing fractures, as mentioned in Dr. Jones' 1/31/2001 letter that could increase the hazards building atop large methane gas seepage areas in a known liquefaction zone.

### B. The report does not address the issues as outlined by the Dept. of Building & Safety in their chart submitted to the 6/7/00 B&F hearing.

The Dept. of Building & Safety submitted a chart to the City Budget & Finance Committee that outlined the issues required to be addressed. No mention is made in the CLA report, and no update on the progress made as to the questions raised on that chart appears to exist. Why?

Also, after talking with numerous officials in the Dept. of Building & Safety, it appears that the CLA review did not include regular meetings with nor collaboration with this department in issuing this new report. In fact, we understand that not all of the Dept. of Building & Safety issues have yet been addressed, including the Level 3 mitigations for the largest methane concentration seeps.

## Comment Letter #16 cont.

5

Ballona Wetlands CLA Report comments  
April 9, 2001

C. The report did not provide data nor analysis of the technique used by petroleum geologists for determining faults that was suggested by Dr. Bernard Endres at the 6/7/00 B&F hearing.

Dr. Endres suggested a third technique for determining the validity and locations of possible faults - that being to take "all of the well records, electrical logs, whether they're old-predates the electrical logs, you plot that data up and it tells you what the geological characteristics are." Why was this technique not used when the seismic surveys outlined by Playa Vista Capital were questioned as to whether or not they would be accurate? 16-

D. Given that Ethane, Propane and Butane have much different characteristics than methane gas, which is lighter than air, why is there no specificity as to the mitigations - that will need to be very different - for these gases, which were also found in significant quantities on the Playa Vista site, according to the April 17, 2000 ETI report?

We understand from speaking with City Fire Dept. officials from other cities that fires involving these gases have been found to be very dangerous to firefighters. There is no mention of the mitigation systems for these gases, which can be mitigated in the same manner as methane. 16-

E. This report was released without the required questions answered:

- 1) What exactly is the mitigation plan for this project for methane and other gases? and
  - 2) Who will pay for these mitigations in perpetuity and with what mechanisms?
- 16-

These questions have still not been answered. According to the January 31, 2001 letter from ETI to David Hsu of the City of Los Angeles, "One of the proposed methane prevention systems, the subsurface venting for the Level III areas which overlay the methane soil gas anomalies, is currently in the research and design stages." This statement indicates the system is still proposed and is not yet tested nor approved. Level III indicates the potentially most explosive areas and these areas must be proven to be able to be mitigated in order to insure the safety of future residents, workers and even those who might be driving by the project site on Lincoln or Jefferson Boulevards at the time of a potential explosion. 16-

Sincerely,



Marcia Hanscom  
Executive Director  
Wetlands Action Network  
PO Box 1145, Malibu, CA 90265  
310-456-5604  
fax: (310) 456-5612



Robert van de Hock  
Chair, Sierra Club Ballona Wetlands Task Force  
PO Box 192, Malibu, CA 90265  
310-456-5604; fax: 310-456-5612



Winston H. Hickox  
Secretary for  
Environmental  
Protection

# California Regional Water Quality Control Board

## Los Angeles Region

(50 Years Serving Coastal Los Angeles and Ventura Counties)

320 W. 4th Street, Suite 200, Los Angeles, California 90013  
Phone (213) 576-6600 FAX (213) 576-6640  
Internet Address: <http://www.swrcb.ca.gov/rwqcb>

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CLA

01 APR 11 PM 1:30



Gray Davis  
Governor

### Comment Letter #17

April 9, 2001

Ronald F. Deaton  
Chief Legislative Analyst  
City of Los Angeles  
City Hall, Room 512  
200 N. Main Street  
Los Angeles, CA 90012

**COMMENTS ON CITY INVESTIGATION OF POTENTIAL ISSUES OF CONCERN FOR  
COMMUNITY FACILITIES DISTRICT NO. 4 PLAYA VISTA DEVELOPMENT PROJECT  
AND HUMAN HEALTH RISK ASSESSMENT PLAYA VISTA DEVELOPMENT LOS  
ANGELES CALIFORNIA PLAYA VISTA DEVELOPMENT PROJECT - 6775 CENTINELA  
AVENUE, LOS ANGELES  
(CLEANUP AND ABATEMENT ORDER NO. 98-125, FILE NO. 98-192)**

Dear Mr. Deaton:

We have received your letter dated March 12, 2001, transmitting copies of the "City Investigation of Potential Issues of Concern for Community Facilities District No. 4 Playa Vista Development Project" (Report) dated March 2001, and the "Human Health Risk Assessment Playa Vista Development Los Angeles California," (Risk Assessment) dated February 6, 2001, for our review and comment. We have completed our review of the Report and Risk Assessment and provide the following comments:

#### General Comments

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is the lead State agency supervising the investigation, monitoring and remediation of soil and groundwater contamination at the Playa Vista site. The Regional Board is taking these actions to ensure the protection of the State's surface and groundwater resources. In addition, the Regional Board is working with the Office of Environmental Health Hazard Assessment (OEHHHA) to evaluate potential health risks associated with this contamination.

Due to concerns expressed by some project opponents regarding potential health issues related to soil and groundwater contamination, methane and other gases (benzene, toluene, ethylbenzene and xylenes (BTEX) and hydrogen sulfide), Regional Board staff have previously and independently met with the United States Environmental Protection Agency; the California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) and the Los Angeles City Department of Building and Safety, as well as numerous private consultants involved with this project, to review and discuss many of the same issues that are addressed in your Report and Risk Assessment.

#### California Environmental Protection Agency

\*\*\*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption\*\*\*  
\*\*\*For a list of simple ways to reduce demand and cut your energy costs, see the tips at: <http://www.swrcb.ca.gov/news/echallenge.html>\*\*\*



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## DEPARTMENT OF CONSERVATION

5816 Corporate Avenue, Suite 200  
Cypress, CA 90630-4731

(714) 816-6847  
FAX (714) 816-6853

713271



October 10, 2000

RECEIVED BY

OCT 19 2000

MIKE - MICHIGAN J.E.G.

Mr. Vitaly B. Troyan  
City Engineer  
Department of Public Works  
650 South Spring Street, Suite 200  
Los Angeles, CA 90014

RE: Southern California Gas Company Gas-Storage Project Operations

Dear Mr. Troyan:

Thank you for your letter regarding the gas storage project and its relationship to the Playa Vista Project. The following is provided to address the issues expressed in your letter.

The Division's oversight of gas-storage projects consists of three elements: project review meetings, facilities testing, and environmental compliance inspections.

At least once a year, Division staff meet with project operators to review all aspects of each project, including any new geologic data, performance graphs, wellsite monitoring reports, pollution prevention activities at wellsites and facilities, and hydrogen sulfide production and its treatment. In addition, reservoir pressure graphs, which track the project's gas-injection rates and surface and inventory pressures, and reports on any gas waste or loss are reviewed. The reviews for Playa del Rey indicate that all reservoir conditions are consistent with prior year's performance and no gas losses are occurring within the project.

The most recent facilities testing at Playa del Rey took place in December 1998 and April 2000. Minor deficiencies were noted and all were corrected. Additional safety system testing is witnessed by Division engineers twice a year. The Division also witnesses tests of the surface and subsurface safety valves even if a well is inactive. All safety systems must be operational before a well can be put on line.

Environmental inspections are carried out annually by Division staff. If problems are found, they are corrected immediately by the operator or a follow-up inspection is



scheduled to confirm that corrective actions have been completed. The Division's last inspection was conducted on January 14, 2000, with a follow-up in March. The latest inspection indicated that Southern California Gas Company was in full compliance with Division regulations.

The overall safety and performance of Southern California Gas Company in Playa del Rey has been excellent. Furthermore, the gas company has received the Division's Outstanding Lease and Facility Maintenance Award for its "Dunlap" lease for 12 consecutive years, and for the "Treasure" and "Blackline" leases for 7 consecutive years. This award is presented only to operators who have maintained their leases in an exemplary manner.

Our records indicate that there have been no significant problems or deviance from Division regulations. Our inspection records show that any problems are always corrected in a very timely manner.

As shown in the studies we have reviewed and the information we have received from the Playa Vista developer, Southern California Gas Company, and the Exploration Technologies, Inc. report for the City of Los Angeles, there are areas of the project where gas seepage is present. However, we have no information to indicate that any of this gas is derived from the Southern California Gas Company Playa del Rey gas storage project. (Tracer materials are added to the stored gas for leak-detection and other purposes.)

Concerning your final question regarding the plugging and abandonment requirements for wells, the Division will require any project proponent to replug any wells present in the project area to present-day standards. Also, if any unrecorded wells are discovered, the Division will require these wells to be plugged and abandoned to present-day standards. The Division will recommend that all wells be vented if a structure is to be placed over or in proximity of a well.

I hope that the above discussion has addressed your concerns regarding the Playa del Rey gas-storage project. If you have any other questions, please call me.

Sincerely,



R. K. Baker

District Deputy

Division of Oil, Gas, and Geothermal Resources

RKB:bd

RE  
OF ENGINEERING  
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TER FILES

OCT 13 2000

SIGNEL MICHALSKI

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VICE-PRESIDENTCORINA R. ALARCON  
BILL EHRlich

## CITY OF LOS ANGELES

CALIFORNIA

RICHARD J. RIORDAN  
MAYORRECEIVED  
CLA

01 FEB 28 PM 12:48

DEPARTMENT OF  
BUILDING AND SAFETY  
201 NORTH FIGUEROA STREET  
LOS ANGELES, CA 90012-2627ANDREW A. ADELMAN  
GENERAL MANAGERWALTER R. KRUKOW  
EXECUTIVE OFFICER

February 28, 2001

Mr. Ron Deaton, Chief Legislative Analyst  
Office of the Chief Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA. 90012

Attention: Gerry Miller  
Assistant Chief Legislative Analyst

**PLAYA VISTA PROJECT - CLA REPORT**

At the City Council meeting of June 23, 2000, the City Council instructed the Chief Legislative Analyst, with the assistance of the departments of Building and Safety (LADBS), City Planning, Public Works, City Attorney, City Administrative Officer (CAO), and any other agencies, consultants or individuals deemed appropriate by the CLA, including, but not limited to Dr. Victor Jones (Project Peer Reviewer), to:

- 1) Oversee the development of tasks necessary for collecting and analyzing any additional information required to assess the structural, health and earthquake safety risks associated with methane and other gases on the site;
- 2) Hold a public meeting within three weeks, or as soon thereafter as possible, to obtain input relative to the issues that will be considered and the estimated time frames for preparing the report, and
- 3) Report back to the Planning and Land Use Management (PLUM) Committee in 120 days with a report and recommendations regarding issues raised during this process.

Subsequently, the CLA's office conducted a series of meetings with the aforementioned departments to identify all related issues and assign tasks and responsibility to various departments for addressing these issues. The following tasks were assigned to LADBS:

- Determine the relationship, if any, between gases at the Playa Vista Phase I (CFD4) project site and the gas in the Southern California Gas Company Storage Facility at Playa del Rey;
- Determine the existence of the postulated Lincoln Fault; and
- Identify and recommend methane mitigation and monitoring requirements.

## BACKGROUND

In the Spring of 1999, preliminary soil gas surveys and testing were done at the Playa Vista site and the results revealed elevated concentrations of methane gas.

In the Summer of 1999, LADBS and Playa Vista agreed to retain the service of Exploration Technologies, Inc. (ETI) as the Peer Reviewer for the Playa Vista project to assist LADBS staff.

In the Fall and Winter of 1999 and the Spring of 2000, Playa Vista consultants, in consultation with ETI, conducted extensive soils gas surveys and testing in tract area 49104 of the Playa Vista Phase I project site. The result of this study, as summarized in the April 17, 2000 ETI report titled, "Subsurface Geochemical Assessment of Methane Gas Occurrences Playa Vista Development, First Phase Project," reflected various methane and geological conditions. Further studies to address these conditions were recommended.

On June 7, 2000, the Budget and Finance Committee of the City Council discussed the Community Facilities District bond issues and raised concerns regarding environmental, planning, building and safety issues relative to the Playa Vista Project - Phase I, in relation to the issuance of Mello-Roos bonds for construction and acquisition of public facilities for this project.

On June 23, 2000, at the direction of the City Council, the CLA formed a task group comprised of the CLA's Office, LADBS, Public Works Bureau of Engineering, Department of City Planning, City Attorney, City Administrative Officer (now known as the Office of Administrative Research and Services (OARS)), and the Los Angeles Fire Department to address the above described issues. Different tasks and responsibilities were assigned to various departments for addressing these issues.

Since then, LADBS has conducted frequent meetings on the issues, including periodic joint meetings with the consultants and the Peer Reviewer to accomplish the three aforementioned tasks assigned to the Department. The results of numerous site surveys and testings, reviews and analyses of historical and new data, and technical evaluation sessions among experts are summarized below.

## **DISCUSSION OF THE RELATIONSHIP BETWEEN THE GASES AT THE PLAYA VISTA PHASE I (CFD4) PROJECT SITE AND THE GAS IN THE SOUTHERN CALIFORNIA GAS COMPANY STORAGE FACILITY AT PLAYA DEL REY**

Playa Vista consultants conducted several soil gas studies and analyses, including nine gas samples taken directly from several of the storage and observation wells at the Southern California Gas Company Storage Facility. All samples were analyzed for composition and similarities with gas samples taken from the Playa Vista Phase I project site. These studies are summarized in the following reports:

- "Sampling and Analysis of Gas from the Southern California Gas Company Playa Del Rey Gas Storage Field", by Camp Dresser & McKee, Inc. (CDM), dated September 5, 2000 (Attachment 1)
- "Comparison of Gas Analyses from Southern California Gas Company Injection Wells and from Various Observation (Reservoirs Storage) Wells", by Dr. Ian Kaplan, Zymax Forensics, dated September 21, 2000 (Attachment 2)

According to Playa Vista consultant, Dr. Ian Kaplan, "...data show that the chemical and isotopic characteristics of the natural gas stored by Southern California Gas Company are different from the gas detected at the Playa Vista property." (Attachment 2, Page 5)

Peer Reviewer, ETI, reviewed and analyzed the above reports and concluded in their January 31, 2001 letter to LADBS that, "Comparison of the chemical and isotopic data from these wells with the near-surface and Ballona gravel aquifer gas samples previously analyzed on the Playa Vista site clearly shows that the storage gases are not present in any of the methane anomalies east of Lincoln Blvd. The gas seepage on the Playa Vista site appears to be derived from the Pico Sands at depth and does not have the geochemical signatures characteristic of storage gas." (Attachment 3)

LADBS staff reviewed ETI's conclusion and concur that the combined geochemical and geophysical information indicates that the methane gas observed at the Playa Vista Phase I project site does not come from the gas stored in the Southern California Gas Company Storage Facility at Playa del Rey. (Attachment 4)

## **DISCUSSION OF THE EXISTENCE OF THE POSTULATED LINCOLN FAULT**

Playa Vista consultants conducted the following subsurface geologic evaluations of the Playa Vista project site:

- "Geologic Study to Evaluate the Potential for Active Faulting Near the Intersection of Lincoln and Jefferson Boulevards, at the Playa Vista site, in the City of Los Angeles, California", by Earth Consultants International, Inc., dated July 2000 (Attachment 5)

- "An Evaluation of the Subsurface Structure of the Playa Vista Project Site and Adjacent Area, Los Angeles, California", by Davis & Namson, dated November 16, 2000 (Attachment 6)

As part of their investigation, Earth Consultants International reviewed previously published geologic maps and reports covering the area and unpublished geologic and geotechnical reports prepared by other investigators for the Playa Vista site. They also conducted a subsurface study consisting of borings and Cone Penetrometer Tests across the area where the fault is postulated. From all of their data, they could not, "...find evidence to support the existence of a supposed 'Lincoln Boulevard fault' across the property." (Attachment 5, Page 1, Third Paragraph)

Davis and Namson's evaluation employed five different geologic and geophysical methods between May and October 2000 to evaluate the possibility of faulting at the site:

- 1) a search of the existing geologic literature;
- 2) construction of subsurface maps and cross sections based on well data;
- 3) purchase and interpretation of pre-existing Chevron seismic reflection data;
- 4) acquisition and interpretation of a shallow sub-surface geological survey along Jefferson Boulevard and a deeper seismic survey over the entire project site; and
- 5) an offshore geophysical survey southwest of the site.

From this work, they, "...could find no evidence for the postulated Lincoln Boulevard or postulated Charnock faults." (Attachment 6, Page 2, Second Paragraph)

Peer Reviewer, ETI, reviewed and analyzed the above reports and concluded in their January 31, 2001 letter to LADBS that, "...interpretation of the chemical and geophysical data does not support the existence of the Lincoln Blvd. Fault that was postulated to dip westward and possibly transect strata within the existing gas storage field ..." (Attachment 3)

LADBS staff reviewed ETI's conclusion and concur that the postulated Lincoln Boulevard Fault, as defined in ETI's April 17, 2000 report, is unsubstantiated. (Attachment 7)

## **DISCUSSION OF THE METHANE MITIGATION AND MONITORING REQUIREMENT**

Playa Vista consultants, in consultation with ETI, conducted site testings and research analyses to establish design criteria for effective methane prevention, detection and monitoring systems.

A baseline methane soil gas survey that reflects methane concentration levels for the entire project site was conducted and provided a clearer understanding of the methane distribution. (Attachment 8) This data enabled Playa Vista consultants to develop a comprehensive program addressing the design criteria of the above methane systems, as described in the following report:

- "Playa Vista Methane Prevention, Detection and Monitoring Program", by Methane Specialists, Inc., dated January 30, 2001 (Attachment 9)

The report included a Methane System Requirements matrix that detailed specific mitigation and monitoring requirements for the entire project site based on the level of methane concentration. There are three different levels of methane concentrations identified for the project site: Level I, Level II and Level III. Level I represents concentration levels of less than 100 parts per million of volume (ppmv). Level II represents concentration levels of between 100 and 12,500 ppmv and Level III represents concentration levels of above 12,500 ppmv. All levels require a basic mitigation prevention system below the building, including a 12-inch gravel blanket, with pipes to ventilate gas from underneath an impermeable membrane and methane detection alarm systems within the building. For Levels II and III, automatic ventilation systems triggered by elevated methane concentration levels beneath the impermeable membrane and continuous monitoring systems are also required. Additionally, Level III requires a subsurface venting system consisting of vent pipes drilled into the 50-foot gravel aquifer to vent methane gas, thereby mitigating the accumulation of methane within the aquifer and below the ground surface and also reducing the surface emissions of methane. Playa Vista implemented a pilot program wherein more than 70 temporary vent wells were drilled at the site to determine the feasibility and effectiveness of venting subsurface accumulations of methane. The program demonstrated that subsurface methane gas can be vented. A permanent subsurface venting system is currently in a progressive design stage that will establish criteria for determining the exact number of, locations of, and size of permanent subsurface wells.

The report concluded that, "Each of the levels will provide a comprehensive program of prevention, detection, and monitoring systems along with a maintenance and testing program. These systems will ensure adequate and appropriate safety for all building occupants." (Attachment 9, Page 1)

Peer Reviewer, ETI, reviewed and analyzed the above report and concluded in their January 31, 2001 letter to LADBS that, "...the proposed systems meet our recommendations, provided that the systems meet, or exceed all detail specifications as required by Department of Building and Safety." (Attachment 10)

LADBS staff reviewed and agree with ETI's conclusion that the proposed methane prevention, detection and monitoring systems for the Playa Vista project are adequate for safe development. (Attachment 11)

If you have any questions or need additional information, please call Raymond Chan, Chief of Engineering Bureau, at (213) 977-6380, or me at (213) 977-5960.

Very truly yours,



ANDREW A. ADELMAN, P.E.  
General Manager

BUILDING AND SAFETY  
COMMISSIONERS

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CALIFORNIA



RICHARD J. RIORDAN  
MAYOR

DEPARTMENT OF  
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201 NORTH FIGUEROA STREET  
LOS ANGELES, CA 90012

ANDREW A. ADELMAN  
GENERAL MANAGER

WALTER R. KRUKOW  
EXECUTIVE OFFICER

January 31, 2001

ATTACHMENT 4

APPENDIX C

David Nelson  
Senior Vice President  
Playa Capital Company  
12555 W. Jefferson Bl., #300  
Los Angeles, California 90066

<u>CURRENT REFERENCE</u>	<u>REPORT</u>
<u>REPORT/LETTERS</u>	<u>NO.</u>
Methane Report	-

<u>DATE(S) OF</u>
<u>DOCUMENT</u>
1/31/01

<u>PREPARED BY</u>
ETI

The report concerning the Playa Del Rey Gas Storage Field and the Lincoln Boulevard fault has been reviewed by the Grading Section of the Department of Building and Safety. According to the report, the "combined geochemical and geophysical information proves beyond a reasonable doubt that the methane gas seepage observed on the Playa Vista site does not come from the Southern California Gas Storage Field." The Department of Building and Safety accepts this conclusion.

  
DAVID HSU  
Chief of Grading Section

(213) 977-6329

cc: Exploration Technologies, Inc.



## APPENDIX D



# Exploration Technologies, Inc.

3698 Westchase Dr. • Houston, Texas 77042 • (713) 785-0393 • FAX (713) 785-1550

January 31, 2001

ATTACHMENT 10

Mr. David Hsu  
Chief, Grading Section  
City of Los Angeles  
Dept. of Building and Safety  
201 North Figueroa Street  
Los Angeles, CA 90012-2827

Dear David:


We have reviewed the proposed plan for the methane prevention, detection and monitoring systems from Methane Specialist and CDM, as defined in their report of January 30th, 2001 and outlined by their matrix table "METHANE SYSTEM REQUIREMENTS," and find that the proposed systems meet our recommendations, provided that the systems meet, or exceed all detail specifications as required by Department of Building and Safety.

One of the proposed methane prevention systems, the subsurface venting for the Level III areas which overlay the methane soil gas anomalies, is currently in the research and design stages. The subsurface venting system, which primarily targets the 50-foot gravel aquifer, provides a necessary level of protection, supplementing the building systems, for development of the Level III areas.

Building in Level III areas is contingent upon a functional subsurface venting system to the satisfaction of the Department of Building and Safety in consultation with the peer review team.

If you have any questions or require additional information, please contact me.

Sincerely,  
Exploration Technologies, Inc.

  
Victor T. Jones, III, Ph.D.  
Peer Reviewer for LADBS  
President, Exploration Technologies, Inc.



**CITY OF LOS ANGELES**  
**INTER-DEPARTMENTAL CORRESPONDENCE**

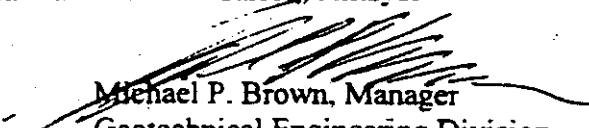
**APPENDIX E**

Date: October 24, 2000

To: Ronald F. Deaton,  
Chief Legislative Analyst

Attention: Barbara Garrett, Analyst

From: Vitaly B. Troyan, P.E.  
City Engineer

By:   
Michael P. Brown, Manager  
Geotechnical Engineering Division

**Subject: PLAYA VISTA - INVESTIGATION OF POTENTIAL OIL FIELD SUBSIDENCE**

Per a request from your office, attached are the results of the survey of the Playa Vista area.

The survey was performed by the Bureau of Engineering's Survey Division in October, 2000. The survey recorded the current elevations of benchmarks in the area and compared them to the elevations of those same benchmarks in 1975, 1980, and 1985. These elevations were adjusted using a National Geodetic Survey (NGS) benchmark as the baseline. Not all of the benchmarks had data for 1975 and 1980, in those cases the partial data was provided. The survey met the tolerances for National Geodetic Survey, Second Order Class II, which means that loop closures were very small (8mm's times the square root of the loop distance in km). Therefore, the survey was completed to a very high degree of accuracy. The attached survey report describes the survey methods, and equipment used, in greater detail.

The elevation change measured in the area over the 25 year period ranged from -2.66 inches (subsidence) to +0.81 inches (uplift). In order to interpret the data more easily, our office has prepared a map depicting the location of each of the benchmarks as well as the elevation change from the earliest available date. The map also shows the approximate limits of the oil field.

If you have any questions regarding this information please contact Michael Mulhern or Ted Allen of my staff at (213) 847-4011 or (213) 847-4028, respectively.

Attachments: 1) Playa Vista Area Bench Mark Data report from BOE Survey Division  
2) Playa Vista Development Survey Data Map from BOE Geotechnical Division

**CITY OF LOS ANGELES**  
INTER-DEPARTMENTAL CORRESPONDENCE

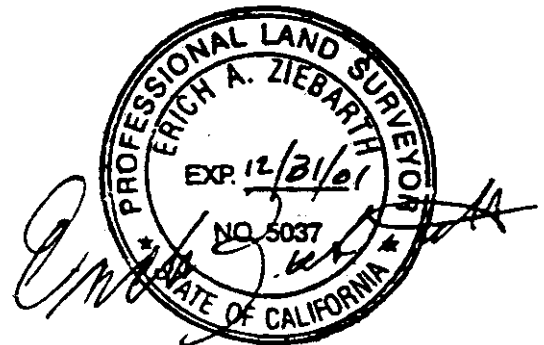
**Date:** October 23, 2000  
**To:** Vitaly B. Troyan, P. E.  
City Engineer  
**From:** Erich Ziebarth, Chief Surveyor *Erich Ziebarth*  
**Subject:** Playa Vista area Bench Mark Data

The attached spreadsheet was prepared in response to your request for evidence of settlement or uplift in the Playa Vista area.

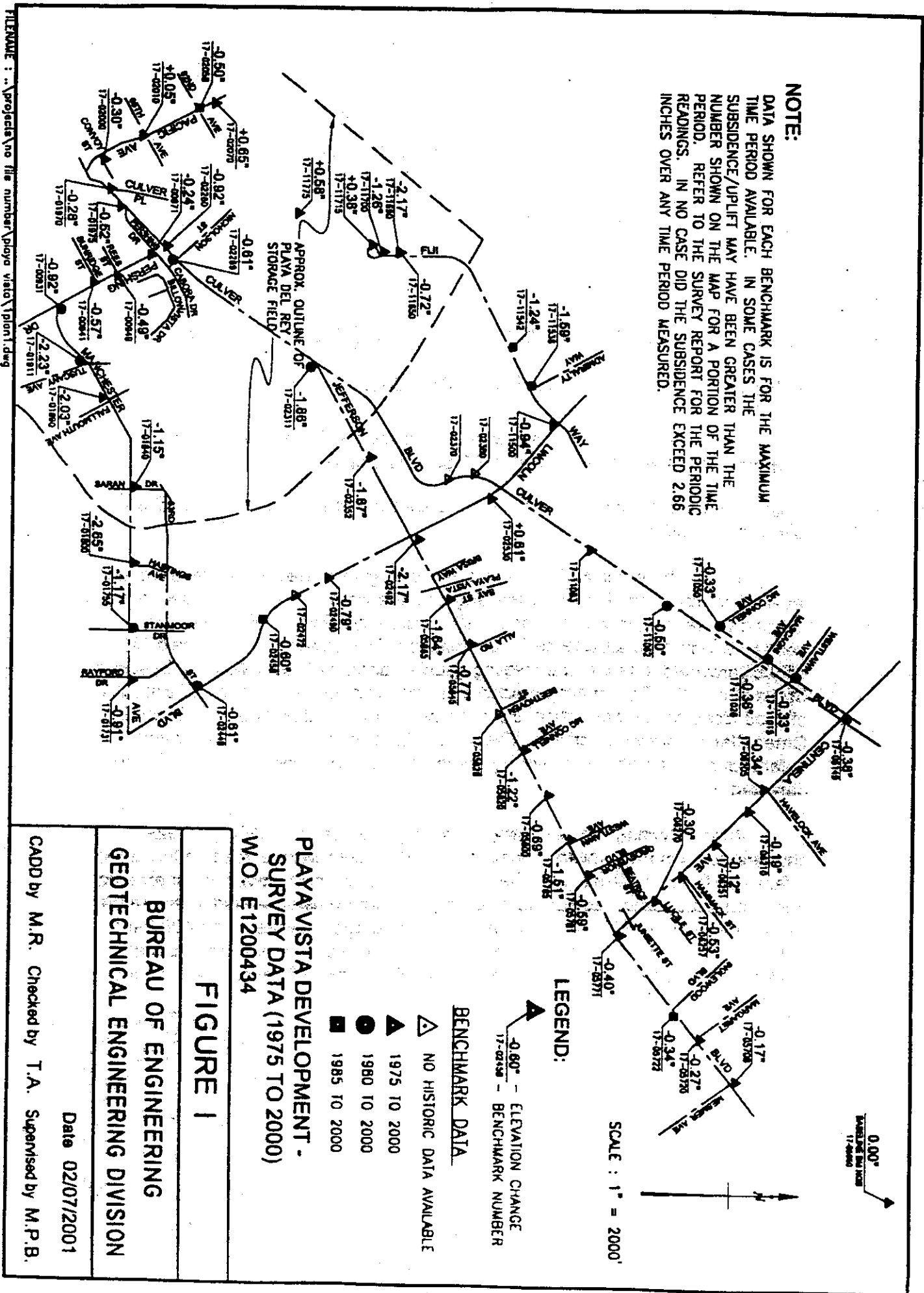
Following is a synopsis of the Playa Vista area precise leveling that the Survey Division conducted:

Initially the published primary levels through the area were identified and leveling courses run. Additional leveling courses were run to form closed loops to check closure tolerances. A bench mark outside the area of influence was needed to establish a baseline for comparison. The bench mark selected (#17-05650) provided a tie into the leveling courses done by NGS (National Geodetic Survey) in 1997. The leveling procedures and methods used complied with, and all loop closures fell well within, the tolerances published by NGS for Second Order Class II precision criteria. The Leica Digital level used was calibrated before, during and after the leveling courses were run. There were no anomalies detected.

After collecting the field data, it was adjusted using STAR\*LEV least squares adjustment software. Finally, all bench marks were placed on the same reference datum because a simple difference in published elevations of existing bench marks between subsequent years could not be used. A shift in the datum used between the 1975 and 1980 level runs, and again between the 1980 and 1985 level runs, made it impossible to do this. Therefore by placing all bench marks on the same reference datum (NGS, 1997), the difference in elevations will reflect any vertical movement.



**NOTE:**  
DATA SHOWN FOR EACH BENCHMARK IS FOR THE MAXIMUM TIME PERIOD AVAILABLE. IN SOME CASES THE SUBSIDENCE/UPLIFT MAY HAVE BEEN GREATER THAN THE NUMBER SHOWN ON THE MAP FOR A PORTION OF THE TIME PERIOD. REFER TO THE SURVEY REPORT FOR THE PERIODIC READINGS. IN NO CASE DID THE SUBSIDENCE EXCEED 2.66 INCHES OVER ANY TIME PERIOD MEASURED.



**APPENDIX F**  
**CITY OF LOS ANGELES**  
**INTER-DEPARTMENTAL CORRESPONDENCE**

Date: February 26, 2001

To: Ronald Deaton  
Chief Legislative Officer

Attn.: Barbara Garrett

From: P.J. (Mike) Michalski, Engineering Geologist III  
Bureau of Engineering



Subject: INTERPRETATION OF SURVEY DATA RELATING TO POTENTIAL  
SUSBSIDENCE  
PLAYA VISTA PROJECT - (File 96-092) WO E1200434

On October 24, 2000, the Department of Public Works, Geotechnical Engineering Division (GED) provided a memo describing the benchmarks used and the degree of accuracy of the data and map summarizing the City of Los Angeles survey data. Per your request, this memo provides interpretation and conclusions of the data.

The maximum subsidence observed at one location in the area over the period from 1975 to 2000 was 2.66 inches. No significant or clearly defined trend of increased subsidence with the Playa Del Rey Oil Field or any other specific area was observed. The location with the greatest level of subsidence is an elevation marker placed on the curb of Manchester Boulevard at the intersection of Hasungs Avenue. Another one of the markers displaying a greater than 2-inch settlement is in a sidewalk of Lincoln Boulevard at Jefferson Boulevard, a distance of approximately four-fifths of a mile from the previously-noted marker. This suggests that settlement is localized and may be associated with curb, sidewalk and gutter settlement along major streets.

Current building codes are adequate to address the minimal level of subsidence and uplift observed in the area. There is no evidence that proposed methane mitigation measures will result in increased potential for subsidence in the area.

If you have any questions with this review, please contact Mike Mulhern, CEG 1507, HG 306 at (213) 847-4011 or Ted Allen, CE, at 847-4028.

c: Clark Robins, Deputy City Engineer  
Susan Pfann, Deputy City Attorney

BOARD OF  
BUILDING AND SAFETY  
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CITY OF LOS ANGELES  
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RICHARD J. RIORDAN  
MAYOR

DEPARTMENT OF  
BUILDING AND SAFETY  
201 NORTH FIGUEROA STREET  
LOS ANGELES, CA 90012

ANDREW A. ADELMAN  
GENERAL MANAGER

WALT KRUKOW  
EXECUTIVE OFFICER

December 19, 2000

ATTACHMENT 7

Mr. David Nelson  
Senior Vice President  
Playa Capital Company  
12555 W. Jefferson Bl., #300  
Los Angeles, CA 90066

APPENDIX G

<u>CURRENT REFERENCE</u> <u>REPORT/LETTER(S)</u>	<u>REPORT</u> <u>NO.</u>	<u>DATE(S) OF</u> <u>DOCUMENT</u>	<u>PREPARED BY</u>
Review letter	-	12/07/00	ETI
Geologic Report	-	11/16/00	Davis & Namson

The referenced review letter and geologic report concerning an evaluation of the subsurface geologic structure of the Playa Vista project site have been received by the Grading Section of the Department of Building and Safety. The purpose of the geologic report was to evaluate the possibility of a Lincoln Boulevard fault, as postulated in the report of April, 2000 by Exploration Technologies, Inc. The conclusion of the report is that no evidence was found for the postulated Lincoln Boulevard fault. Exploration Technologies, Inc has reviewed the data and agrees that a postulated Lincoln Boulevard fault that would provide a pathway for gas from the Southern California Gas Co. storage field to the Playa Vista site is unsubstantiated. The Department accepts these conclusions.

  
DAVID HSO  
Chief of Grading Section

(213) 977-6329

cc: Exploration Technologies, Inc  
Davis & Namson

# Exploration Technologies, Inc.

3698 Westchase Dr • Houston, Texas 77042 • (713) 785-0393 • FAX (713) 785-1550

January 31, 2001

Mr. David Hsu  
Chief, Grading Engineering Section  
City of Los Angeles  
Dept. of Building and Safety  
201 North Figueroa Street  
Los Angeles, CA 90012-2827


Dear David,


***Playa Del Rey Gas Storage Field and Lincoln Blvd. Fault:***

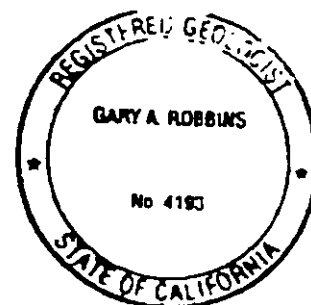
As confirmed by our earlier letters (December 20, 2000 V T Jones to Ray Chan), we have completed our preliminary evaluation of the regional soil gas data collected over the entire Playa Vista site, including the locations for 119 infill soil gas samples to complete this data set. The regional soil gas data collected as part of Phase II evaluations shows no evidence of major gas leakage from the Playa Del Rey Gas Storage Field. In addition we have collected and completed evaluation of nine additional storage gas reservoir samples taken directly from several of the storage and observation wells. Comparison of the chemical and isotopic data from these wells with the near-surface and Ballona gravel aquifer gas samples previously analyzed on the Playa Vista site shows that the storage gases are not present in any of the methane anomalies observed east of Lincoln Blvd. The gas seepage on the Playa Vista site appears to be derived from the Pico Sands at depth and does not have the geochemical signatures characteristic of storage gas.

Preliminary interpretation of the geophysical data from seismic profiles supports the premise that the methane gas found east of Lincoln is moving upward within a vertical zone of disrupted strata from beds of the Pico Formation. Offsets in reflections of the seismic profile may be interpreted as zones of disrupted strata, which are likely permeable to gas. Preliminary data reprocessing suggests the presence of low-velocity zones (possibly due to the presence of gas) that appear to be associated with both the disrupted strata and with the location of the anomalous methane found on the Playa Vista site. Thus the near-surface gas anomalies appear to be issuing from fractures or other disruptions that directly underlie the methane anomalies as defined by the soil gas surveys. As noted in an earlier letter, (Victor Jones to Ray Chan, December 7, 2000) interpretation of the chemical and geophysical data does not support the existence of the Lincoln Blvd. Fault that was postulated to dip westward and possibly transect strata within the existing gas storage field, as communicated in our April 17, 2000 report to LADBS. This combined geochemical and geophysical information supports that the methane gas seepage observed on the Playa Vista site does not come from the Southern California Gas Storage Field.

Sincerely,

  
Victor T. Jones, III, Ph.D.  
Peer Reviewer for LADBS  
President, Exploration Technologies, Inc.

  
Gary A. Robbins, Ph.D.  
Peer Reviewer for LADBS  
Manager, Tankinfo, LLC



Mr. Deaton

- 2 -

April 9, 2001

### **Comments on Report**

The Report provides a succinct and detailed summary of the significant information available for this site. Based upon the information contained in the Report and Board staff's own review of information available for this site, meetings and telephone calls between Regional Board staff and various federal, state and local agencies involved with this project, Regional Board staff concur with the Report's conclusions that the Southern California Gas storage facility is not the source of methane found at the site, that the presence of methane or other gases do not pose an unacceptable health risk (comments regarding the evaluation of potential risk associated with the other gases is discussed in detail in Comments on Risk Assessment below), and that there is sufficient information for the assessment of and protection against potential health effects associated with other gases (methane is not considered toxic and any mitigation requirements for methane would be required for fire and explosion prevention, as determined by the City of Los Angeles).

Although Regional Board staff also reviewed and discussed information with other agencies regarding the potential for subsidence and the presence of an active earthquake fault, this was done from the perspective of surface and groundwater resources and human health protection. Regional Board staff are not qualified to comment on the adequacy or interpretation of information related to these issues for other reasons.

### **Comments on Risk Assessment**

Upon receipt of your request for review and comment on the Risk Assessment, Regional Board staff forwarded a copy of the Report (for background information) and Risk Assessment to OEHHA. Regional Board staff requested OEHHA review the Risk Assessment to evaluate the rationale, methodology and information used to calculate the potential health risks associated with the BTEX and hydrogen sulfide gases.

OEHHA has completed its review of the Risk Assessment and concur that the rationale, methodology and information used to calculate the potential health risks associated with BTEX and hydrogen sulfide gases is reasonable and conservative. Therefore, Regional Board staff concurs with the Report's conclusion that "...Potential health risks...are below the benchmarks established by the regulatory agencies to indicate insignificant risk, with no further investigation or remediation warranted." Regional Board staff will continue to review and analyze additional information, as needed, to ensure the protection of human health and the environment. A written copy of OEHHA's review will be forwarded to you.

Please call me at (213) 576-6737 if you have any questions.

Sincerely,



John Geroch  
Associate Engineering Geologist  
Site Cleanup Unit I

### **California Environmental Protection Agency**

\*\*\*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption\*\*\*  
\*\*\*For a list of simple ways to reduce demand and cut your energy costs, see the tips at: <http://www.swrcb.ca.gov/news/echallenge.html>\*\*\*



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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Office of Environmental Health Hazard



Winston H. Hickox  
Agency Secretary

Joan E. Denton, Ph.D., Director  
Headquarters • 1001 I Street • Sacramento, California 95834  
Mailing Address: P.O. Box 4010 • Sacramento, California 95812-4010  
Oakland Office • Mailing Address: 1515 Clay Street, 16<sup>th</sup> Floor • Oakland, California 94612



Gray Davis  
Governor

MEMORANDUM

TO: John Geroch  
California Regional Water Quality Control Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, California 90013

VIA: James C. Carlisle, D.V.M., Chief  
Applied Risk Assessment Unit

FROM: Julio Salinas Ph.D., Biochem.D.  
Hazardous Waste Toxicology Section

DATE: April 9, 2001

SUBJECT: REVIEW OF THE HUMAN HEALTH RISK ASSESSMENT, PLAYA VISTA  
DEVELOPMENT, LOS ANGELES, CALIFORNIA

2001 MAY 10 P 1:50  
RECEIVED  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

Upon the request of the Los Angeles Regional Water Quality Control Board (LARWQCB), I reviewed the document entitled "Human Health Risk Assessment, Playa Vista Development, Los Angeles, California" (hereinafter the Report) prepared by Kleinfelder, Inc., and dated February 6, 2001. I also reviewed the additional requested information provided on April 3, 2001 by Scott Dwyer to John Geroch, describing the procedure for the estimation of the soil concentration of the contaminants.

*Verification of input data and output results*

The risk assessment prepared by Kleinfelder is reasonable and believed to be protective of human health. Some information is not explicitly explained, such as the calculations used to estimate soil concentrations from soil gas concentrations. Following the review of the two documents referenced before, I verified the calculations and assumptions related to soil concentrations and associated risk estimates, using the same Johnson and Ettinger Model, version 1.2 (September 1998) described in the Report. The procedure used by the authors consisted in the following four steps:

Step 1. Results of soil gas sampling and analysis from three reports conducted across the Playa Vista Site in 1999 and 2000 were compiled and the data were statistically reduced and analyzed.

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.



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John Geroch  
April 9, 2001  
Page 2

Results of maximum and average values for the contaminants of potential concern expressed as soil gases (in ppmv) reported in Appendix B are:

## Appendix B - Summary of Soil Gas Survey Analytical Results.

Concentration	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	H <sub>2</sub> S
Maximum, ppmv	3.85	5.09	1.50	3.12	1.39	41
Average, ppmv	0.24	0.18	0.29	0.25	0.16	0.11

**Step 2.** Results from the table above expressed as concentration in soil gas (in ppmv) were converted to concentration in air (in  $\mu\text{g}/\text{m}^3$ ), and the results presented in Table 2-2 - Source Vapor Concentrations for the Chemicals of Concern. The conversion was done using the following expression and assuming normal conditions for the contaminant:

$$\mu\text{g}/\text{m}^3 = (1\text{ part}/10^6\text{ parts}) \times (\text{MW, g/mol}) \times (1\text{ mol}/22.4\text{ L}) \times 10^6\text{ }\mu\text{g}/\text{g} \times (10^3\text{ L}/\text{m}^3)$$

**The results of this conversion are:**

**Table 2-2 - Source Vapor Concentrations for the Chemicals of Concern**

Concentration	Benzene	Toluene	Ethylbenzene	m-,p-Xylene	o-Xylene	H <sub>2</sub> S
Maximum, µg/m <sup>3</sup>	12,300 (13,000)	19,095 (21,000)	6,530 (7,100)	13,580 (15,000)	6,043 (6,600)	57,148 (62,000)
Average, µg/m <sup>3</sup>	766	0.18	0.29	0.25	0.16	0.11

Results shown in parenthesis are those from this reviewer and found to be in reasonable agreement.

**Step 3.** In a third step, the Johnson and Ettinger model is typically used to estimate the magnitude of the migration of VOC contaminants from subsurface soil through a building foundations and into the indoor respirable air. The Johnson and Ettinger model however requires soil concentrations expressed in  $\mu\text{g/kg}$  as input, and as shown before, the available concentrations in soil gas were in  $\mu\text{g/m}^3$ . To resolve this problem, the authors used the Johnson and Ettinger model in a "backwards" mode for calculating the source soil concentration that would result in the source vapor concentration (in  $\mu\text{g/m}^3$ ) calculated in step 2.

John Geroch  
April 9, 2001  
Page 3

Since the model is written as a spreadsheet, it is possible to test values using a "trial-and-error" approach. Values of soil concentration ( $C_R$ ,  $\mu\text{g/kg}$ ) were entered as input values until cell No. 15, "Source vapor concentration,  $C_{\text{source}}$ , in  $\mu\text{g/m}^3$ ) showed the same values in Table 2-2.

Results of concentration of contaminants in soil (in  $\mu\text{g/kg}$ ) used in the risk assessment are reported in several tables in Appendix A.

Appendix A - Johnson and Ettinger Model Spreadsheets

Concentration	Benzene	Toluene	Ethylbenzene	m-, p-Xylene	o-Xylene	H <sub>2</sub> S
Average, $\mu\text{g/kg}$	1.52	2041	28.15	88.5	39.6	24.3
Maximum, $\mu\text{g/kg}$	24.3	57.6	5.45	7.15	4.56	0.0654

Step 4. Cancer risk and hazard estimates associated with the soil concentrations were then calculated by the Johnson and Ettinger model for each input data. The estimated Lifetime Extra Cancer Risks associated with long-term exposure to benzene using soil gas data from the Playa Vista site and using the Johnson and Ettinger model for subsurface vapor intrusion into buildings are shown in the table below:

	Benzene soil data and risk estimates	
Estimated input data, $C_R$	Maximum soil concentration:	24.3 $\mu\text{g/kg}$
	Average soil concentration:	1.52 $\mu\text{g/kg}$
Source vapor concentration, $C_{\text{source}}$	Maximum soil gas concentration:	2.23E+04 $\mu\text{g/m}^3$
	Average soil concentration:	1.66E+02 $\mu\text{g/m}^3$
Infinite source building concentration, $C_{\text{building}}$	Maximum indoor air concentration:	9.71E-03 $\mu\text{g/m}^3$
	Average indoor air concentration:	6.05E-04 $\mu\text{g/m}^3$
Incremental risk from vapor intrusion to indoor air, carcinogen	Associated with maximum concentration:	1.2E-07
	Associated with average concentration:	7.2E-09

John Geroch  
April 9, 2001  
Page 4

Results are for a soil screening risk assessment, using either the maximum or the average concentration of benzene appearing in the Report. Standard default values were used for all migration and physico-chemical properties as well as exposure factors. These values were verified and are conservative for the potential exposure scenarios that could occur at the Playa Vista site.

*Elimination of contaminants for a risk assessment based on detection frequency*

The Report endorses the elimination of low frequency detected contaminants from the risk assessment, and cites the U.S. EPA Risk Assessment Guidance for Superfund (RAGS), Human Health Evaluation Manual, Part A - Baseline Risk Assessment (December 1989) as reference. Preliminary elimination of contaminants for consideration in a risk assessment based on less than 5% positive detection frequency of chemicals among all analyzed samples is unsupported for contamination problem of the scale such as Playa Vista. Low positive detection frequencies are typically found in contamination problems involving extensive areas and relatively low severity of contamination. Also please consider the following situations:

(a) A soil surface area that has not been fully characterized for contamination as a result of an inappropriate sampling strategy. For example, if a grid with cells too large were selected for the sampling plan, this would decrease the probability of locating or generating "hits" for a hot spot, resulting in a false negative presence of hot spot. This source of potential error should be analyzed by conducting spatial distribution analysis.

(b) Groundwater samples collected from various monitoring wells (MWs) and the results collected over time and/or over locations (space) are pooled. For example, results collected on a certain date showed that few positives were from one single MW; although this contamination is real, according to the "low frequency criteria" the results would be wrongly eliminated. This is an unsupported decision, and a spatial analysis is recommended. If contamination levels are monitored over time, it is possible that the levels may change over time. If one or more MWs show decreasing or increasing levels over time, elimination of this information would be a serious error. In situations such as these, a temporal trend analysis is warranted to determine whether concentrations are related to time.

I do not agree with a *generic* assumption regarding the low frequency criteria as described in RAGS, in particular if elimination is done without considering the numerical values and spatial and temporal considerations. For a site as large as Playa Vista Development, where a very large number of samples have been collected and analyses done, professional judgment is critical. A frequency of 5% of 1,155 samples is equivalent to 58 results, and elimination of 58 results would be unacceptable. I concur with the authors regarding the inclusion of the entire data set as done in this Report, approach that provides a degree of conservatism to balance some of the uncertainties associated with the risk assessment.

John Geroch  
April 9, 2001  
Page 5

Review Summary

The approach used by Kleinfelder to estimate health risks associated with the chemicals detected in soil gas at the Playa Vista Redevelopment site is reasonable. The model used to estimate the subsurface vapor intrusion of contaminants into buildings is widely used in migration analysis and is recognized as a conservative model. The maximum concentration of benzene 24.3  $\mu\text{g/kg}$  soil, is assumed to be constant for the next 30 years, and the associated indoor air concentration is assumed it will not be affected by outdoor air conditions such as wind, temperature, precipitation, or barometric pressure. In addition, a number of highly conservative assumptions were used, such as frequency (350 days per year) and duration (30 years), for 24 hours a day, a house built exactly above the point of maximum benzene concentration, and a number of other assumptions related to the toxicity characterization of benzene. The concentrations of air contaminants assume no soil remediation or no soil gas engineering control activities. The estimated maximum and average lifetime extra cancer risks associated with exposure to soil levels of benzene, as found in certain portions of the Playa Vista are in consequence, most likely overestimated. As long as the concentration of benzene in soil does not exceed values by more than an order of magnitude above those found on site, it is my opinion that cancer risks are expected to be below levels of biological significance.

Respectfully submitted.

April 6, 2001

RECEIVED  
CLA

01 APR -9 PM 3:24

Ronald F. Deaton  
Chief Legislative Analyst

Dear Mr. Deaton:

I am writing to express concern and to make a recommendation.

CONCERN: In studying the report, I am not assured of the public's safety should Playa Vista develop the Ballona Wetlands. It is too tenuous & risky. It could cost us, Los Angeles Taxpayers, millions of dollars in losses and/or damages (as the Belmont Center already).

RECOMMENDATION: In fairness to both us the taxpayers and the developers, as our elected representatives & Playa Vista know that Mello-Roos money will be made available to them if, and only if they make it a matter of public record that is a legal contract binding Goldman Sachs, Dean Witter, Morgan Stanley, Robert Macquire Penta and whomever else is involved as developers, binding in perpetuity to take full financial responsibility for any lawsuits and/or disasters arising from methane gas earthquakes/cancers, etc. on this questionable land we want to develop.

I am certain that you get the gist of what I am recommending. Let them put their money where their mouth is, rather than using our money to develop and then hold us economically responsible in the event of a disaster.

If they can stand behind this development by doing so, then we can take them seriously, especially if Goldman Sachs, Dean Witter and Morgan Stanley will indemnify the city of Los Angeles. If not, they are setting us up for economic rape.

I believe that your office and legal counsel can write up a nice, tight contract protecting us, the taxpayers and voters, while respecting the developers. For it is like having a father responsible for the welfare of his offspring, rather than expecting taxpayers to do so.

I would like a personal response regarding this recommendation. My address: 12540 Mitchell Ave. LA 900  
Anne M. DeBenedictis



01 APR 10 AM 11:41

**Faye Ku**

6202 Vista del Mar, Apt. #253  
Playa del Rey, CA 90293

Telephone: (310) 745-2802

Email: <mailto:littlefaith@mediaone.net>

Web page: <http://people.we.mediaone.net/littlefaith/>

April 7, 2001

Barb Garrett  
Office of the Chief Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

Dear Ronald F. Deaton:

My family and I are residents of Playa del Rey, and we have examined the report prepared by your office regarding potential risk factors at the Playa Vista Development Site. Our comments are as follows:

- 1) It is unacceptable that so much of the fact-finding comes from consultants hired by the development company. Although city officials have reviewed the information, it is easy for the studies to be skewed by design, one-sided research to be presented.
- 2) There seemed to be a lot of focus on finding the source of the methane. It seems to be that thermogenic sources of methane are MORE difficult to mitigate and predict than leaks from human activity there. The letter from ETI (Appendix H) states "Thus the near-surface gas anomalies appear to be issuing from fractures or other disruptions that directly underlie the methane anomalies..." Even if the "Lincoln Blvd. Fault" does not exist, is there not still a chance that quakes from nearby faults could cause gasses trapped within the disrupted strata to move rapidly to the surface? In this situation, what level of mitigation can possibly be considered sufficient?
- 3) Given that there exists high levels of natural methane which all parties agree must be mitigated, it would make sense to focus more attention on the mitigation techniques. According to the letter from ETI (Appendix D), the proposed methane prevention system, the subsurface venting system, is still under research and design. We must see the results of this research before deciding whether the system is truly safe.
- 4) The reports regarding subsidence are impressive records of history. How does it predict future subsidence when the ground will be compacted by heavy new construction?

19- 1

19- 2

19- 3

19- 4

Thanks for recording our comments, and we hope that you will recommend a Subsequent Environmental Impact Report to be prepared before allowing any more bulldozing to occur in this Sensitive Environmental Area. While the methane problems are serious and disturbing, what's more disturbing is that this development is continuing against the will of the people in the community, and it will fill in one of the last open spaces available to Los Angelinos within the city, destroying an important habitat that can still be preserved for all the species that depend on it. This is poor use of public money in the form of bonds or any other assistance. We would like to see your report emphasize the uncertainties that still exist and seek to find truth, rather than the statements of Playa Vista's own consultants designed to mislead and pacify an angry public.

19- 5

Thank you,



Faye Ku, David Cook, and Sage Cook (6 months)

## Comment Letter #20

April 9, 2001

Attention: Barb Garrett  
Office of the Chief Legislative Analyst  
City of Los Angeles  
200 N. Main St., Room 512  
Los Angeles, CA 90012

RECEIVED  
CLA

01 APR 10 AM 11:41

**Subject: City Investigation of Potential Issues of Concern for CF District No. 4 Playa Vista Development**

Dear Ms. Garrett:

Please accept this letter as my public comments in regards to the above referenced investigation.

I found the objectivity of the study to be highly questionable for the following reasons:

1. First the "Stepped Study Design" appeared to rely heavily on **past studies** or studies that were recently completed. Since most of the data produced by past studies was produced by consultants hired by Playa Vista, the data is highly subjective since the developer has a prejudiced interest in hiring a consultant that will produce data that is favorable for the development to occur. **This is a clear conflict of interest and undermines the reports conclusions.**
2. The "Stepped Study Design" also predetermined that no scenario could exist that would render the site unsuitable for development. This is the same flawed and subjective methodology that resulted in the city's approval to build on the contaminated Belmont Learning Center site. The Stepped Study implied that there would be feasible mitigation for any and all "areas of concern" regardless of the range of data for the areas of concern. This implies a heavily biased and subjective outcome before the data was even analyzed.

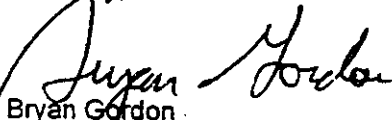
There was a company or person, called Kleinfelder, whose opinion influenced this investigation. Who or what is Kleinfelder? Is this a California corporation, a sole proprietorship or a freelance consultant? Kleinfelder has no credibility to comment on this report unless the CLA can provide additional information to validate its reputation in analyzing methane samples.

After reviewing **Figure 2.1 Methane Concentrations**, I was astounded to learn that under Section 2.3 **City Review, Conclusions and Mitigations**, that the city appears to believe that a mitigation system actually exists that will function in an environment that contains methane concentrations above 150,000 ppmv within an aquifer that lies only 20 – 30 feet below the surface. This assumption is speculative at best, considering that if such a mitigation system existed it would have been installed at Belmont years ago.

**One enormous flaw with this analysis is that far too much of the data was produced by consultants or specialists hired or paid for by Playa Vista.** Such data has very little credibility considering the enormous stake and financial interest that Playa Vista Capital has in eliminating or concealing any issues, which would jeopardize its investment.

I strongly disagree with the CLA's conclusion that the methane contamination can be safely mitigated and will not pose a significant health risk to workers and inhabitants on the project site. Such a careless and speculative conclusion will pose a significant liability to the taxpayers of the City of Los Angeles for knowingly placing resident's in harms way.

Sincerely,



Bryan Gordon  
3650 S. Barrington Ave.  
Los Angeles, CA 90066  
310-390-2064





The  
Gas  
Company

## Comment Letter #21

RECEIVED  
CLA

01 APR 10 AM 11:46

Michael M. De La Torre  
Governmental Affairs Manager

April 9, 2001

Ronald F. Deaton  
Chief Legislative Analyst  
200 N. Main Street  
Los Angeles, CA 90012

RE: City Investigation of Potential Issues of Concern for Community  
Facilities District No. 4 Playa Vista Development Project

Dear Mr. Deaton:

The Gas Company is pleased that your findings verify what nearly 60 years of operation, studies and analysis have revealed:

- There is no evidence of gas seepage from the storage field.
- There is no significant or clearly defined trend of increased surface subsidence.
- The postulated Lincoln Boulevard Fault's existence is not supported by any evidence.
- The risk from an earthquake causing large volumes of storage gas to escape is unsupported by the evidence.

The Gas Company looks forward to providing any further information that you require in this matter.

Sincerely,

Michael De La Torre

Southern California  
Gas Company

555 W. Fifth Street  
Los Angeles, CA  
90013-1011

Mailing Address:  
Box 513249, GT26E  
Los Angeles, CA  
90051-1249

tel 213 244-2545  
fax 213 244-4997



DEPARTMENT OF CONSERVATION  
STATE OF CALIFORNIA

01 APR 13 AM 11:18

April 6, 2001

801 K STREET  
SACRAMENTO  
CALIFORNIA  
95814

PHONE  
916/322-1080

FAX  
916/445-0732

TDD  
916/324-2555

INTERNET  
consrv.ca.gov

GRAY DAVIS  
GOVERNOR

Mr. Ronald F. Deaton  
Chief Legislative Analyst  
Room 512, City Hall  
200 N. Main Street  
Los Angeles, CA 90012

Subject: City of Los Angeles Investigative Report on Community Facilities  
District No. 4 Playa Vista Development Project, Prepared by  
Office of the Chief Legislative Analyst

Dear Mr. Deaton:

The Department of Conservation's Division of Oil, Gas and Geothermal Resources (Division) has reviewed the subject report received under cover letter dated March 12, 2001. The Division supervises the drilling, maintenance, and plugging and abandonment of oil, gas and geothermal wells in California. We offer the following comments on the report for your consideration.

22- 1

The Division concurs with the report that there is no indication that methane seepage within the project area is from the Playa Del Rey gas storage reservoir. However, the Division has not determined that the shallower Pico Sands are the source of the methane gas seepage either.

Determining the adequacy of the proposed methane mitigation measures for the project is beyond the Division's authority. However, the Division recommends that plugged and abandoned wells always be vented if structures are to be built over or in proximity of them.

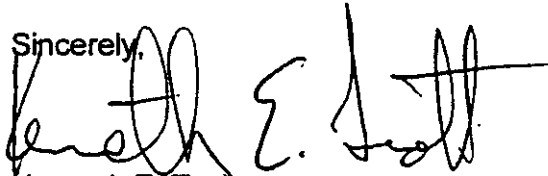
Finally, the City's Planning Department should verify that building plans have undergone Division review prior to the start of construction. To ensure that the proper review is conducted, the Division informational packet, *Construction Project Site Review and Well Abandonment Procedure*, is available to planners and developers. The publication outlines the information a project developer should submit to the Division for review. The site review packet is available from the Division's Cypress district office.

22- 2

Mr. Ronald F. Deaton  
April 9, 2001  
Page 2

Thank you for the opportunity to review the report. If you have questions on our comments, or require technical assistance or information on oil and gas resources, please contact David Sanchez or Richard Baker at the Cypress district office: 5816 Corporate Avenue, Suite 200, Cypress, California 90630-4731; or, phone (714) 816-6847. If you have other questions you may contact me at (916) 445-8733.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth E. Trott". The signature is fluid and cursive, with a large initial "K" and "E".

Kenneth E. Trott  
Environmental Coordinator

cc: David Sanchez  
Division of Oil, Gas and Geothermal Resources, Cypress

Linda Campion  
Division of Oil, Gas and Geothermal Resources, Sacramento



**DIVISION OF  
MINES & GEOLOGY**

■ ■ ■

801 K STREET  
MS 12-32  
SACRAMENTO  
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95814

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**GRAY DAVIS  
GOVERNOR**

**Comment Letter #23**

**DEPARTMENT OF CONSERVATION  
STATE OF CALIFORNIA**

01 MAY 17 PM 4:29

May 11, 2001

Barb Garrett  
Office of Chief Legislative Analyst  
512 City Hall  
200 N. Main Street  
Los Angeles, CA 90012

Dear Ms. Garrett:

I have completed my review of the November 16, 2000 fault investigation report by Davis and Namson for the Playa Vista site. This letter is an addendum to my letter to you dated March 30, 2001 in which I concurred with the Davis and Namson and Earth Consulting International (July 25, 2000) reports' conclusion that there was no evidence to support the existence of the proposed "Lincoln Boulevard" fault. This letter addresses the offshore geophysical investigation contained in the Davis and Namson report.

Davis and Namson subcontracted with Dr. D. Francis and Dr. M. Legg to conduct an offshore geophysical survey designed to address the possible fault-controlled nature of the east-northeast-striking bluffs just south of the Playa Vista property. Although no evidence of faulting was revealed in the vicinity of the bluffs, two minor features were interpreted by Francis and Legg as faults F1 and F2. These short, northeast-striking inferred faults were not shown to extend on land to the northeast. However, the evidence both for the features interpreted as faults and for their lack of continuity on shore was poorly documented in the Davis and Namson report. Subsequent conversations with T. Davis led to a meeting on April 17, 2001. At this meeting, attended by T. Davis, D. Francis, M. Kennedy, M. Reichle, and this writer, the original geophysical evidence was examined and additional published documentation was evaluated.

Based on this meeting, the following observations can be made:

- The existing data is equivocal and does not permit a definite interpretation. The features may or may not be faults.

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- Equally plausible explanations for the apparent vertical separation of seismic reflectors imaged in seismic lines 3 and 9 include intra-formational faults (sedimentary consolidation features) that are not seismogenic, or normal depositional features characteristic of fluvial (river) depositional environments. These would not pose a significant seismic hazard to the site.
- If these features are faults:
  - The interpretation by Francis and Legg that the lack of continuity of seismic reflectors imaged above 300 feet (uniboom lines 3 and 9) is evidence of faults F1 and F2 is not compelling.
  - Image resolution is not sufficient to state that proposed fault F1 does not continue east of seismic survey line 11.
  - Additional seismic survey techniques (sparker seismic reflection survey) imaged unfaulted reflectors at depths between 300 and 2,000 feet. Either proposed fault F1 is confined to latest Pleistocene and Holocene deposits and does not offset older sedimentary deposits, or the total geologic displacement of proposed fault F1 is limited to early to mid Holocene time, which is an extremely unlikely hypothesis.

Following is a summary of the offshore geophysical survey data.

The interpretation of postulated faults F1 and F2 is based on uniboom seismic lines 3 and 9. The uniboom seismic reflection survey was used to image geological features to a depth of about 100 meters. A reflector imaged in uniboom line 3 can be interpreted to be vertically displaced by about 3 meters (F1). However, the reflector is poorly imaged over a distance of about 43 meters, so it is not possible to ascertain fault geometry if the interpreted feature is a fault. Therefore, it could have a near vertical dip, or postulated fault F1 could dip as shallow as about 5°. Postulated fault F1 is very poorly defined in uniboom line 9 and the reflector is not clearly detectable. Evidence for the proposed fault F2 is not convincing and no sense or amount of displacement can be interpreted.

The feature interpreted as fault F1 is confined only to the imaging of the uniboom survey (upper 100m). The sparker seismic reflection surveys extend to a depth of about 600 meters (2000 feet). Significantly, continuous reflectors are imaged where F1 should extend. Therefore, the reflectors are not vertically displaced within the resolution of the sparker imaging, which is about 3-5 meters. This means that either the feature interpreted as fault F1 is not a fault, or that the total geologic

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displacement is less than the image resolution of the sparker survey. Sedimentary rocks at a depth of about 1200 feet (360m) probably belong to the Upper Pico Formation (about 1.6 million years old, based on oil well data documented in Davis and Namson). Assuming that F1 is a fault with up to 3 ½ m of vertical separation, a geologic slip rate of about 0.3 – 0.4mm/yr is inferred if the fault offsets the 15,000yr/6,000yr unconformity. If a constant rate of displacement has occurred in the past 500,000 years, then 180m of total vertical displacement should have occurred. This amount of vertical displacement should be apparent on the deeper sparker surveys, but is not. It is remotely possible that proposed fault F1 is very young and all of its displacement has occurred in Holocene time, thus precluding its being imaged in the deeper sparker seismic reflection surveys. However, this possibility is considered extremely unlikely.

Onshore bedrock geology does not indicate a continuous fault zone along a northeasterly strike. Minor bedrock faults along a northeast trend similar to postulated fault F1 were interpreted by Metzner (1935) and Hodges (1944), but are confined to below the Upper Bentonite Marker (Upper Repetto Fm. - about 3.2 million years old). These faults are less than about 2000 feet long and have the opposite sense of vertical displacement. What is interesting, and perhaps significant, is that the faults interpreted as offsetting schist basement rocks are very short. The configuration of the top of the schist as depicted by Metzner and Hodges has a NW trending ridge. The short faults mapped by Metzner and Hodges do not cross this ridge, but instead seem to radiate from the ridge. This suggests an alternative interpretation that the "faults" are not faults but perhaps paleo stream channels or other irregularities in the schist surface. Later mapping by Hester (1986) showed short, minor faults offsetting the schist basement rocks along a significantly different strike. These minor faults did not offset the Upper Bentonite Marker.

In conclusion, the offshore seismic surveys in the Davis and Namson report are inconclusive with respect to demonstrating that the features identified as faults F1 and F2 are seismogenic structures. Proposed fault F1 is best imaged on uniboom seismic line 3. Here a reflector is apparently vertically displaced (down to the north) about 4msec (about 12 feet or 3.6 meters). However, the imaging is not of sufficient resolution to determine dip angle and the distance between the possible correlation of reflectors across this interpreted structure is about 43m. Therefore, the dip angle is unconstrained between 90° and 5°. The unconstrained dip and the observation that the fault does not extend into older geologic rocks allows alternative explanations for the apparent offset of the reflector seen in uniboom seismic line 3. One alternative explanation is that F1 and F2 are intra-formational faults that are caused by the rapid deposition and consolidation of latest Pleistocene and Holocene fluvial deposits associated with the rise in sea level at the end of the Pleistocene

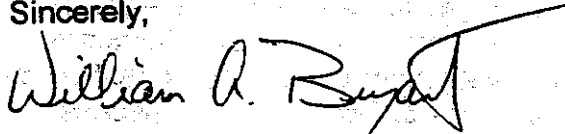
**Comment Letter #23 cont.**

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Epoch. Additional plausible explanations are that the apparent offset of the reflectors imaged in uniboom seismic lines 3 and 9 is due to lateral facies changes (changes in the type of sedimentary deposits) that are very common within fluvial depositional environments, or represent discrete stream channel margins. Therefore, it is uncertain to what extent these offshore features, which have been interpreted by D. Francis and M. Legg as faults F1 and F2, contribute to the onshore hazard of the Playa Vista site.

If you have any further questions, call me at (916) 323-9672 or e-mail me at [bbryant@consrv.ca.gov](mailto:bbryant@consrv.ca.gov).

Sincerely,



William A. Bryant, CEG 1554  
Program Manager, Active Faults

cc: J. Davis, State Geologist  
M. Reichle  
M. Kennedy

**Ms. Barb Garrett  
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**References Cited**

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- Earth Consultants International (ECI), 2000, Geologic study to evaluate the potential for active faulting near the intersection of Lincoln and Jefferson boulevards, at the Playa Vista site, in the City of Los Angeles, California: Unpublished report prepared for Playa Capital Company, LLC, project no. 800130-0001, July 25, 2000.**
- Hester, R.L., 1986, Geology of the Playa del Rey gas storage field, Los Angeles County, California: Unpublished report for Southern California Gas Company.**
- Hodges, F.C., 1944, Gas storage and recent developments in the Playa del Rey oil field: California Division of Oil and Gas, Summary of Operations – California Oil Fields, v. 30, no. 2, p. 3-10.**
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RECEIVED  
CLA

01 APR 11 PM 1:26

March 27, 2001

Ms. Barb Garrett  
Legislative Analyst  
200 N. Main Street, Room 512  
Los Angeles, CA 90012

**RE: City Investigation of Potential Issues of Concern for Community Facilities  
District No. 4, Playa Vista Development Project**

Dear Ms. Garrett:


I am submitting these comments on the Report of the above-referenced investigation. I want to commend the Office of the Chief Legislative Analyst for its thoroughness and for its attention to detail and scrupulous scientific standards. I find the report important for two reasons:

First, because of the results. As a member of the local community, I am relieved to learn that there is no evidence of a new earthquake fault in our community, that the Gas Company natural gas storage facility is not leaking, that Playa Vista is not subsiding, that the site poses no health risks, and that there are mitigation measures for any methane detected on the site.

Second, as a long-time Playa Vista supporter, I want to see the project move forward. I hope that your Report allows us to put the issues investigated behind us once and for all and that we will finally see the realization of a project that creates community, stimulates economic development, and undertakes the much-needed restoration of the Ballona Wetlands.

Thank you for your consideration.

Sincerely,

  
Signature Date

Givora Doeh  
Print Name

11805 W. Jefferson Blvd. #2  
Address

Culver City CA 90230  
City

## RESPONSES TO COMMENTS RECEIVED

### Comment Letter #1: Howard Hackett, Past President Del Rey Homeowners

1-1 Comments noted.

### Comment Letter #2: Alfredo Urso

- 2-1 The health risk assessment (HRA) completed by Kleinfelder ("Human Health Risk Assessment Playa Vista Development, Los Angeles, California," February 6, 2001) for benzene, toluene, ethylbenzene, and xylene (BTEX) and hydrogen sulfide emissions (H<sub>2</sub>S) at the Playa Vista Development site indicates that BTEX emissions at the site present an insignificant health risk (see Report Section 5). The potential health impacts of BTEX and H<sub>2</sub>S were assessed using very conservative assumptions, including the assumptions that the highest levels of BTEX found at the site enter a residence (a closed space with limited air dispersion and individuals exposed were present at the residences 24-hours a day, 350 day a year for 30-years). The proposed methane mitigations would further reduce the potential health risks associated with soil and groundwater contamination. The HRA has been reviewed by the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) and the California Office of Environmental Health Hazard Assessment (OEHHA) (see Comment Letter #17) and those agencies indicate that the HRA is reasonable and conservative. The LARWQCB is the lead agency for soil and groundwater contamination at the site. The remediation process will ensure that site conditions are safe for proposed uses.
- 2-2 All structures to be built at the Playa Vista Development site will meet or exceed City and state code requirements. Building code requirements, including the designated methane mitigation system, accommodate unique site characteristics, such as soil type and load capacity, depth to groundwater, seismic zones, and methane emissions, to ensure the structural integrity of constructed facilities.
- 2-3 Wetland issues are outside the scope of the Report. The Environmental Impact Report (EIR) (EIR No. 90-0200(C)(CUZ)(CUB), State Clearinghouse No. 90010510) for Phase I of Playa Vista Project was certified in May 1993. Wetland issues and required mitigation measures are detailed in the Biotic Resources Section, Section V. D, of that EIR. In addition, wetland issues are regulated and overseen by the state and federal agencies. The Draft EIR for Phase II of the Playa Vista Project is under preparation and will address Wetland issues associated with the Phase II project area. Persons interested in being notified of the release of the Draft EIR for Phase II of the Playa Vista Project should contact the Planning Department at (213) 580-5266.
- 2-4 Development activities undertaken at the Playa Vista Development site are in compliance with the laws, rules, and regulations governing such activities.
- 2-5 Comment noted. See also Responses to Comments 5-2 and 5-5.

2-6 Comments noted.

**Comment Letter #3: Debra-Lynne Terrill**

- 3-1 Construction projects at the Playa Vista Development site are not anticipated to change subsurface methane migration patterns. The methane gas prevention and detection systems to be installed under building foundations allow for the collection and diversion of the soil gases, directly below the building, through vent pipes. In essence, this prevention and detection system allows the methane to "freely escape" upwards.

The recommended methane mitigations have several levels of protection to ensure public safety. All methane mitigation levels require methane prevention systems, methane detection systems, and methane monitoring requirements. These comprehensive measures assure that methane is properly mitigated, is monitored to ensure the effectiveness of the mitigations over time, and provide for contingency plans in the unlikely event that high methane levels are detected within a structure.

- 3-2 The City requires that a site-specific geotechnical report be completed prior to the construction of any structure to ensure that any specific site conditions are appropriately addressed in structure design. As discussed above in Response to Comment 2-2, all structures built in the City must meet or exceed City and state code requirements. Building code requirements, including the designated methane mitigation system, accommodate unique site characteristics, such as soil type and load capacity, depth to groundwater, seismic zones, and methane emissions, to ensure the structural integrity of constructed facilities. All structures built at the Playa Vista Development site will comply with such standard City practices and processes.

Among the design alternatives which can be used to address soil type and load capacity, depth to groundwater, and seismic zones, are pilings and grade beams, mat foundations, and stone columns. Piles and stone columns and the impermeable membrane required as methane mitigation can be "sealed" to accommodate methane mitigation systems. Stone columns and driven piles densify the soil surrounding them, decreasing soil porosity and permeability. In addition, other elements of the methane prevention system, such as vent pipes and gravel layers, will dilute and vent any methane gas, minimizing the amount of gas that can accumulate underneath the methane barrier.

- 3-3 Figure 2.1 only presents methane levels at the 4 foot level, as the methane concentrations at that depth were most pertinent to establishing the appropriate level of methane mitigations. However, many types of gas surveys were conducted to study the issue of methane and other gases on the site: including approximately 2,000 four-foot gas samplings to identify the methane concentration levels; surface flux surveys to measure the amount of gas seeping to the surface; deep vent well measurements to measure the amount of gas venting from the 50-ft. gravel aquifer; and several studies to identify the geologic conditions beneath the surface and to determine the characteristics of the aquifer.

- 3-4 Earthquakes are a substantial concern for all development within the southern California region. Building codes have been developed to address, to the maximum extent practicable, structural issues associated with earthquake events. There is no evidence to suggest that methane emissions at the Playa Vista Development site would be altered as a result of an earthquake and therefore create a risk different than that currently identified and mitigated.
- 3-5 Table 2-1 of the "Methane Sampling Data Assessment Playa Vista Development, Los Angeles, California," February 7, 2001 prepared by Kleinfelder, Inc. summarizes the studies in which H<sub>2</sub>S concentrations in soil gas samples were measured. The summary includes a description of the assessment, a description of the measurements, and quality control assurance methods utilized in the studies. The studies themselves are referenced in that document and contain detailed information regarding sample locations and sampling methodology. A total 1,199 soil gas survey samples were analyzed for H<sub>2</sub>S, with H<sub>2</sub>S being detected in only 1% of the samples.
- 3-6 The impacts of both methane and BTEX were evaluated in the Report, refer to Sections 2 and 5, respectively. Methane is not an air toxic and is of primary concern due to its combustible nature. These impacts are appropriately mitigated. The HRA completed by Kleinfelder ("Human Health Risk Assessment Playa Vista Development, Los Angeles, California," February 6, 2001) for BTEX and H<sub>2</sub>S considers the additive effects of benzene, toluene, ethylbenzene, xylene, and H<sub>2</sub>S and determined impacts from such emissions to be insignificant. Also see Response to Comment 2-1 and 3-1.
- 3-7 The procedures for identifying and re-abandoning oil wells at the Playa Vista Development are consistent with practices statewide and overseen by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources.

There are only three wells in close proximity to where building development is proposed. Playa Vista site is currently in the process of re-abandoning these three wells, in accordance with the California Department of Conservation, Division of Oil, Gas and Geothermal Resources, stringent requirements.

Additionally, letters from the California Department of Conservation, Division of Oil, Gas and Geothermal Resources dated April 2000 and May 2000, regarding the Fountain Park Apartments project and the Visitor Center project, state that "there are no active or abandoned oil wells located within or in close proximity (within ten feet) of the applicant's plan. Therefore this project does not require further review."

- 3-8 See Response to Comments 3-1 and 3-2.
- 3-9 Prior to the 1985 Fairfax district incident, methane mitigation code requirements were non-existent. After the development and implementation of the current mitigation measures, as stipulated in the Los Angeles Building Code, Division 71 and Memorandum of General Distribution (MGD) #92, including the use of vent pipes to dilute the gas migration underneath the building, there have been no further occurrences of this type. In addition, the

recommended methane mitigations for the Playa Vista Development site have several levels of protection to ensure public safety. All methane mitigation levels require methane prevention systems, methane detection systems, and methane monitoring requirements. These comprehensive measures assure that methane is properly mitigated, is monitored to ensure the effectiveness of the mitigations over time, and provides for contingency plans in the unlikely event that high methane levels are detected within a structure.

- 3-10 The report includes the independent review of various state agencies with specific expertise in the areas investigated, as well as the independent review of City staff and City consultants. As indicated in the study design released for public review in July, 2000, to maximize resources the City sought "regulatory and responsible regional and state agency review." The City received no comments regarding the use of public agencies as independent reviewers during the study design public review period.

The California Department of Conservation, Division of Mines and Geology independently reviewed all historic and recent fault related studies, (see Report Section 4; also see Comment Letters #4 and 23). The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources independently reviewed methane information and data (see Report Section 2.2.1; also see Comment Letter #22).

The City contracted with Kleinfelder to perform a health risk assessment for BTEX and H<sub>2</sub>S emissions (see Report Section 5). Kleinfelder had not previously worked on the Playa Vista Development project for the City, Playa Vista Capital, or any other party. The City also had Kleinfelder independently review the methane studies performed to date and the proposed methane mitigations (see Report Section 2).

The LARWQCB and OEHHA independently reviewed the HRA prepared by Kleinfelder and the CLA Report (see Comment Letter #17).

All methane and fault related studies were independently reviewed by Dr. Jones, LADBS's "peer reviewer." Although Dr. Jones' contract is administered by Playa Vista Capital, Dr. Jones takes direction from and reports to LADBS. This arrangement is not unique to the Playa Vista Development Project, but is the general LADBS and Planning Department procedure used for all development projects that warrant outside expertise. In fact, it was the preliminary findings of Dr. Jones which precipitated several of the development issues investigated in the Report. Therefore, it was important that Dr. Jones review the additional information and investigations undertaken to further investigate and resolve those issues.

City staff independently reviewed the various reports and studies generated by the various consultants, comments and information presented by the public, and the reviews performed by outside public agencies.

Finally, the Report was widely circulated for a 30-day public review and comment period. All technical studies were made available for public review and comment. Additional information requested by reviewers was provided, as appropriate.

The firms and individuals contracted by Playa Vista Capital to perform various studies, collect additional information, and evaluate data are known in their fields and respected. Information generated by these entities was independently reviewed by state agencies, independent consultants, City staff, and the public as outlined above. No data or information has been presented to support an assertion that the reports prepared by those consultants are inaccurate.

**Comment Letter #4: William Bryant, Program Manager, Active Faults, California Department of Conservation, Division of Geology and Mines (also see Comment Letter #23)**

Comments noted. Also see Comment Letter #23.

**Comment Letter #5: Airport Marina Group Sierra Club, Ballona Ecosystem Education Project, Grassroots Coalition, and Spirit of the Sage Council**

- 5-1 See Response to Comments 2-1, 2-2, 3-2, 3-6, 3-9, and 5-3.
- 5-2 The City has undertaken several studies regarding various aspects of the Playa Vista Development site, to ensure appropriate development standards and mitigations are incorporated into development and building plans. Over 1,500 soil gas samples were taken to ensure comprehensive methane mapping of the site and development of appropriate methane mitigation systems. Additional studies will be required as appropriate to address site specific conditions as development proceeds. Also see Response to Comments 2-1 and 3-6.
- 5-3 The mitigation measures to be taken to address the presence of methane gas at the site are sufficient and adequate to remove any possible hazard to the residents, commercial, public, and recreational facilities. Public entities are not liable for punitive damages.
- 5-4 The mitigation measures to be taken to address the presence of methane gas at the site are sufficient and adequate to remove any possible hazard to the residents, commercial, public, and recreational facilities. With respect to future sales of residential units, the developers would disclose information relating to methane gas which they are legally required to disclose. There is no guarantee by the City that the units will be sold.
- 5-5 The bonds to be issued are Special Tax Bonds which are payable only from the revenues from a Special Tax levied on the properties within Community Facility District No. 4. The Special Tax is collected in the same manner and at the same time as the ad valorem taxes. No taxpayer subsidies are involved in the issuance or the repayment of these bonds. These bonds do not constitute an obligation of the City's general fund.
- 5-6 The property owner would be responsible for undertaking actions as appropriate in the event the project is abandoned.

- 5-7 The City did not block efforts to perform soil gas testing in the vicinity of old oil wells. Initially, ETI proposed soil gas surveys of the entire project site, including those areas beyond the proposed development sites. However, as the testing of various sites progressed, it was deemed unnecessary to survey the entire project site, as the gas(es) at the Playa Vista Development site did not appear to be attributed to any gas leakages from the old oil wells in the Venice and Playa del Rey areas located far from the proposed development.
- 5-8 Several consultants have verified that the installation of piles and stone columns will not create a long term increase of gas migration from the aquifer. See Response to Comment 3-2.
- 5-9 As indicated on page 3 of the Report, public concerns were raised regarding the potential of the Southern California Gas Company Playa Del Rey Gas Storage Facility being the source of the methane gas at the Playa Vista Development Site. The City conducted the studies and reviews appropriate to ensure that the methane detected at the Playa Vista Development site was not from the Southern California Gas Company Playa Del Rey Gas Storage Facility. Also see Response to Comment 6-2.
- 5-10 The incident that occurred in Hutchinson, Kansas will not occur at the Playa Vista Development Site. Hutchinson, Kansas has completely different geologic conditions than the Playa Vista Development Site. The soft soils conditions and underground salt mines in Kansas provided conduits for gas to migrate horizontally. The geologic conditions and rock types at the Playa Vista Development site would not accommodate that type of long distance horizontal gas migration. Also see Response to Comment 3-9.
- 5-11 See Responses to Comments 5-1 and 5-5.
- 5-12 See Response to Comment 3-10.
- 5-13 Traffic issues are outside the scope of the Report. The Environmental Impact Report (EIR) (EIR No. 90-0200(C)(CUZ)(CUB), State Clearinghouse No. 90010510) for Phase I of Playa Vista Project was certified in May 1993. Traffic issues and required mitigation measures are detailed in the Transportation and Circulation Section, Section V. L.1, of that EIR. The Draft EIR for Phase II of the Playa Vista Project is under preparation and will address transportation and circulation issues associated with the Phase II project area. Persons interested in being notified of the release of the Draft EIR for Phase II of the Playa Vista Project should contact the Planning Department at (213) 580-5266.

**Comment Letter #6: Patricia Trujillo**

- 6-1 See Responses to Comments 5-1 and 5-5.
- 6-2 Dr. Jones of ETI postulated that methane gas detected at the CDF4 site could be a result of gas seepage from the Southern California Gas Company Playa Del Rey Gas Storage Facility. To ensure that seepage from the Southern California Gas Company Playa Del Rey Gas

Storage Facility was not occurring and in response to public concerns regarding the potential for such seepage several studies were undertaken (refer to Section 2 of the Report). Based upon those studies, the City and Dr. Jones concluded that the gas seepage on the Playa Vista Development site appears to be derived from the Pico Sands at depth and does not come from the Southern California Gas Company Playa Del Rey Gas Storage Facility. Also see Comment Letter #22 and Response to Comment 5-9.

- 6-3 The off-shore geologic data does not relate to the postulated Lincoln Boulevard fault. There is no evidence to support the existence of the postulate Lincoln Boulevard fault (see Section 4 of the Report and Comment Letter #4). The California Department of Conservation, Division of Mines and Geology has completed their review of the off-shore anomalies and it appears that the anomalies could be associated with depositional features characteristic of stream channels (see Comment Letter #23).
- 6-4 The major streets have been identified on Figure 2.1.
- 6-5 See Response to Comments 3-1, 3-3, 3-5, and 3-10.
- 6-6 See Response to Comment 5-5.

**Comment Letter #7: Julia Judge**

Comments noted.

**Comment Letter #8: Thomas Judge**

Comments noted.

**Comment Letter #9: Patricia McPherson, President, Grassroots Coalition; Rex Frankel, Chair, Ballona Ecosystem Education Project; Kathy Knight, Special Projects Coordinator, Spirit of the Sage Council and Conservation Chair, Airport Marina Group Sierra Club**

- 9-1 See Response to Comment 3-10.
- 9-2 An Environmental Impact Report (EIR) (EIR No. 90-0200(C)(CUZ)(CUB), State Clearinghouse No. 90010510) for Phase I of Playa Vista Project was certified in May 1993. That document was circulated for public comment in conformance with the requirements of the California Environmental Qualities Act (CEQA). This Report was prepared in response to a City Council request for additional information to assist in deciding whether the City should issue Mello Roos bonds for the project and is not a document required by law, rule, or regulation. A 30-day review period for the Report was appropriate and adequate due to the limited scope of the document.



- 9-3 When the matter of the City's issuing Mello Roos bonds first came before the Budget and Finance Committee, the City Attorney advised that the action of issuing the bonds was exempt from the California Environmental Quality Act (CEQA). Although not required by CEQA, the Committee desired additional environmental studies to assist in deciding whether the City should issue the bonds. The Report for which this comment has been submitted was prepared as a result of that decision. Moreover, the issue raised by this comment, whether recent studies relating to methane and related gases required preparation of a supplemental EIR, was resolved in the City's favor in the recent lawsuit entitled "Grassroots Coalition, et al. v. City of Los Angeles, et al.," Los Angeles Superior Court Case No. BS062858.
- 9-4 The Building and Safety Commission considered the information submitted and the evaluation was considered in the development of the Report.
- 9-5 See Response to Comment 3-7.
- 9-6 See Response to Comment 3-5.
- 9-7 See Response to Comments 2-1, 3-1, 3-2, 3-7, 5-5, 5-10, and 9-5.
- 9-8 See Response to Comment 3-10.
- 9-9 See Response to Comment 3-10.
- 9-10 The Report cites several studies directly utilized in developing the Report. Those studies were made available for review and duplication in 6 City locations. Those studies in turn reference several studies and documents.
- 9-11 The issue of subsidence has been adequately covered by published Division of Oil, Gas and Geothermal Resources report (1974, Sixtieth Annual Report) and the survey data from the Survey Division, Bureau of Engineering. The latter study covers the years 1975 through 2000, and shows negligible subsidence over that period and no pattern of increasing subsidence toward the Playa del Rey Oil Field (see Report Section 3). See also Response to Comments 13-15.
- 9-12 The extensive geophysical surveys found no evidence of the Charnock fault on the Playa Vista Development site. This does not mean that the fault does not exist anywhere; such a discussion is beyond the scope of the Report. There is simply no evidence of the fault on the Playa Vista Development site. The Charnock fault was named by Poland, Garret and Sinnott (1959, Geology, Hydrology and Chemical Character of Groundwater in the Torrance-Santa Monica Area, U.S. Geological Survey Water-Supply Paper 1461) based solely upon a groundwater level anomaly. Other interpretations are possible for the anomaly, and to date there is no published seismic image of the fault in the vicinity of the project. The recent geophysical studies indicate no offsets are visible in sediments deposited during the last 2.5 to 3.0 million years or older, including in areas of the proposed "Lincoln Boulevard

Fault" and the Charnock Fault.

According to research, the September 16, 2000 earthquake did not occur on the postulated Charnock Fault for the following reasons.

1. This 3.2 magnitude earthquake occurred along an east-west striking fault, whereas the postulated Charnock Fault is a north-south striking fault.
2. This earthquake was a thrust type earthquake, whereas the postulated Charnock Fault is most likely to be a strike-slip fault.
3. The focus of this thrust type earthquake occurred 7.6 miles below the surface and the fault plane projects upward seven to eight miles horizontally from the shallow postulated Charnock Fault.

9-13 The Report will be considered by the Planning and Land Use Management Committee of City Council. An opportunity for public comment is provided in all City Council Committee meetings. In addition, the Report was circulated for 30-day public comment and review period, providing an additional opportunity for public comment.

9-14 See Response to Comment 9-4.

**Comment Letter #10: Rose MacHardy**

10-1 See Response to Comment 3-10.

10-2 See Comments 3-1, 3-5, 3-9, and 5-2.

10-3 See Response to Comment 3-10.

**Comment Letter #11: Jonathan Aurthur**

11-1 ETI reviewed all subsequent reports and concurs with the findings of those reports and the CLA's Report. Also see see Response to Comment 3-10.

11-2 See Responses to Comments 2-1 and 3-6.

11-3 The reports are not in conflict, but rather build upon each other. See Response to Comment 3-10 and 11-1.

11-4 See Responses to Comments 2-1, 2-2, 3-1, 3-2, 3-4, 3-6, 3-9, 5-3, 5-4, and 5-5.

**Comment Letter #12: 132 Form Letters with original individual signatures delivered by Playa Capital Companies, LLC**

Comments noted.

### **Comment Letter #13: Stewart Morris**

- 13-1 The City did consider the public comments provided at the July 18, 2000, public hearing. The study scope was expanded to specifically include investigation of subsidence issues in response to comments received at that hearing. Further, technical issues commented on by the public were considered as the study elements were developed and reviewed. The transcript from the July 18, 2000, public hearing has been added to the Reference Section of the Report. See also Response to Comment 3-10.
- 13-2 See Response to Comment 13-1 and Report Section 1.3.
- 13-3 Reports and information were independently reviewed by the City, its consultants, and responsible State agencies. See also Response to Comment 3-10 and 16-11.
- 13-4 The Report was intended to be a focused study to address specific potential safety issues associated with the Playa Vista Development Project site. The draft study scope was released for a 30-day public review and comment to provide in-put into the scope of issues and technical concerns that should be considered. On July 18, 2000, a public hearing was held on the draft study scope, providing an additional opportunity for public in-put. The draft study results were released for a 30-day public review and comment period. Finally, the Report will be considered by the Planning and Land Use Management Committee of City Council. An opportunity for public comment is provided in all City Council Committee meetings. Prior to this focused study on the Playa Vista Development site, several opportunities for public in-put into the project were provided by the City. Also see Responses to Comments 9-13 and 13-1.
- 13-5 See Responses to Comments 3-10, 9-2, 9-3, 9-13, 13-1, 13-3, and 13-4.
- 13-6 Dr. Jones of ETI was integrally involved in the development of study protocols, review of data collected, interpretation of data, and review of study conclusions. Also see the various letters submitted by Dr. Jones and referenced in the Report.
- 13-7 The City, its consultants, and the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources all reviewed the Southern California Playa Del Rey Gas Storage Facility. See Report Section 2, Responses to Comments 3-10, 5-9, 6-2, 16-9 and Comment Letter #22.
- 13-8 See Response to Comment 5-2.
- 13-9 A pilot program consisting of 110 vent wells drilled at the site into the 50-foot aquifer to determine the feasibility and effectiveness of the subsurface venting system proved that the gas(es) in the aquifer could be vented. The venting of gas(es) from the aquifer will mitigate the accumulation of gas(es) within the aquifer and below the ground surface, and also reduce the surface emissions of gas(es). This subsurface venting system adds another preventive measure supplementing the active and passive detection systems. The number of vent wells

to be installed will be determined by site-specific investigations of each project site.

- 13-10 Back-up energy power will be provided by electric battery or equivalent back-up systems.
- 13-11 Ambient noise should not be of a concern with the methane mitigation systems proposed. With respect to future sales of residential units, the developers would disclose information relating to methane gas which they are legally required to disclose.
- 13-12 The methane alarm systems will notify the LAFD, who will respond and, if necessary, order an area to be vacated. Within ten calendar days following the activation of an alarm, a written report shall be submitted by the building owner or the property owners' association to the LAFD and LADBS regarding the alarm activation and the cause of the activation and, if needed, providing recommendations and corrective measures.
- 13-13 If methane detectors are on the premises during an inspection of fire safety devices, LAFD will check to determine whether or not a current methane detector report is on file. If a report is not on file, LAFD will issue a notice for compliance to the building owner.
- 13-14 The building owner or the property owner's association, as applicable, shall have financial responsibility for all costs and expenses associated with the building methane system and the monitoring system, including without limitation all costs associated with testing, maintaining, servicing and repairing the systems and any cost incurred in preparing required reports to be provided to the City. With respect to future sales of residential units, the developers would disclose information relating to methane gas which they are legally required to disclose.
- 13-15 The additional weight of any structure to be built on the project will be considered in site-specific geotechnical reports reviewed and approved by the LADBS. Soil shear strength, density, consolidation potential and other geotechnical soil properties will be measured for each building site. The weight of fully-loaded buildings will be supported by the ground with either conventional foundations, by pilings or grade beams where needed or by common ground modifications such as preconsolidation and pre-leading of fill combined with drains.  
  
Any dewatering of the aquifer will require a hydrogeologic report to assess and mitigate any potential for subsidence. The hydrogeologic study will ensure that groundwater withdrawal will be less than the recharge rate of the aquifer. See also Response to Comments 2-2, 3-2, and 9-11.
- 13-16 The Los Angeles Fire Department was consulted regarding the development of the methane mitigation measures. See also Response to Comment 16-11.
- 13-17 All commenters on the Report will be provided a copy of the final Report and responses to comments received. The Planning and Land Use Management Committee Agenda will provide notice of the consideration of the Report by the Committee.

**Comment Letter #14: Leslie Purcell**

- 14-1 See Report Section 5, Responses to Comments 2-1, 3-5, 3-6, 14-6, and Comment Letter # 17.
- 14-2 See Responses to Comments 3-1, 3-3, 5-2, and 13-9.
- 14-3 See Response to Comment 3-7.
- 14-4 See Response to Comments 5-3, 5-5, 13-3 and 13-4 and Report Table 2-1.
- 14-5 See Responses to Comments 3-10, 9-2, 9-10, and 13-14.
- 14-6 See Response to Comment 2-1. General air quality issues are outside the scope of the Report. The Environmental Impact Report (EIR) (EIR No. 90-0200(C)(CUZ)(CUB), State Clearinghouse No. 90010510) for Phase I of Playa Vista Project was certified in May 1993. Air Quality issues and required mitigation measures are detailed in that EIR. The Draft EIR for Phase II of the Playa Vista Project is under preparation and will address air quality and traffic issues associated with the Phase II project area. Persons interested in being notified of the release of the Draft EIR for Phase II of the Playa Vista Project should contact the Planning Department at (213) 580-5266.
- 14-7 See Response to Comment 9-3.

**Comment Letter #15: Rick Archer, USC Earth Sciences**

- 15-1 Evidence of the lack of isotopic data showing a postulated origin of methane from the Gas Storage Facility has been documented in several previous studies, as has the lack of the marker helium. This includes recent investigations, such as the Camp Dresser & McKee (CDM) Methane Report dated April 29, 1999. This data was considered in conjunction with the review of the Playa Del Rey Gas Storage Facility integrity and the fault information for that area. The evidence in total was used to conclude that the Playa Del Rey Gas Storage Facility was not the source of methane gas at the Playa Vista Development site. See also Response to Comment 3-10, 5-9, 6-2, and 9-10.
- 15-2 See Responses to Comments 3-3.
- 15-3 The total methane concentration, regardless of the source, was used to develop methane mitigation measures. See also Response to Comment 15-1.
- 15-4 See Report Section 4 and Comment Letter #4.
- 15-5 See Response to Comment 15-3.
- 15-6 See Response to Comment 9-10, 13-6, and 16-5.

- 15-7 See Responses to comments 5-2 and 16-12.
- 15-8 See Response to Comment 15-1.
- 15-9 See Response to Comment 3-10, 9-10, 13-6, 15-1, and 16-5.

**Comment Letter #16: Marcia Hanscom, Executive Director, Wetlands Action Network;  
Robert van de Hoek, Chair, Sierra Club Ballona Wetlands Task Force**

- 16-1 See Response to Comment 9-3. The Report provides information for the entire Playa Vista Development site in most instances. As an example Finger 2.1 provides the methane levels for the entire area, not just CDF4.
- 16-2 The City has not ignored ETI's statement that the area be mapped prior to construction. Soil gas surveys have been conducted and mapped to identify the levels of methane concentration of the entire site. The identified level of concentration for an area determines the level of methane mitigation system required for a project. As each future project is submitted to LADBS for review, and prior to permit issuance, additional site-specific gas surveys will be required to identify any changes in the pre-established levels of concentration and to ensure that the level of mitigation system required is based on the most current levels of concentration. See also Response to Comment 5-2 and Report Section 2.
- 16-3 See Response to Comment 3-10.
- 16-4 See Responses to Comment 9-4 and 9-14.
- 16-5 See Response to Comment 13-6.
- 16-6 The Personnel and Fire Departments were consulted regarding potential health risks associated with BTEX and advised that consultant services were required to complete the HRA. It was further recommended that the as-needed consultant contracts administered by the Bureau of Engineering be utilized for such an effort. Kleinfelder was engaged pursuant to those recommendations. Also see Response to Comment 16-11.
- 16-7 See Response to Comment 16-6 and 16-11.
- 16-8 LADBS forwarded copies of all pertinent documents to the CLA. Also see Response to Comment 2-1 and 3-5.
- 16-9 Other than providing requested information, reports, and studies Latham and Watkins, Playa Vista Capital, and the Southern California Gas Company played no role in the production of the Report.
- 16-10 The City Council instructed the CLA to oversee the resolution of issues addressed in the Report and various other City Departments to cooperate with the CLA as appropriate. The

Bureau of Engineering participated in the development of the Report and represented all interests of that Bureau. See also Response to Comment 16-11.

- 16-11 The City Council did not establish a "task force," but instructed the CLA to oversee the resolution of issues addressed in the Report and various other City Departments to cooperate with the CLA as appropriate. In that effort, the CLA established a working group. Meetings of the working group were internal City meetings, which do not require public notice. Participants included the CLA's Office, City Attorney's Office, LADBS, Bureau of Engineering, Planning Department, Office of Administrative Research Services, and the Fire Department. Also see Response to Comments 9-2, 13-4, and 16-9.
- 16-12 ETI's research acknowledges that geologic formations and "fractures", at the Playa Vista Development site, allow subsurface gas(es) to migrate upwards to the site via the 50-foot aquifer. The methane mitigation system for this project was designed to ventilate the 50-foot aquifer, minimizing the accumulation of gases within the aquifer. Also see Responses to Comments 3-1, 3-2, 5-2, 5-3, 5-5, and Report Sections 2 and 4.
- 16-13 A draft chart, identifying potential additional studies and listing issues/questions and solutions for the Playa Vista Development Project, was presented at a June 2000 Budget and Finance Committee Meeting. The issues included: methane monitoring systems and contingency plans; geotechnical and seismological studies of the postulated Lincoln Blvd. Fault; the relationship between gases at the Playa Vista site and the gas storage facility; a health and risk assessment; ground subsidence; stone columns and pile driving; and future permits. Review of the draft chart illustrates that all of the issues included on the chart have been addressed.
- 16-14 See Responses to Comments 3-1, 3-10, 13-9, 16-8, and 16-11. In addition refer to the Report and correspondence from LADBS to the CLA included in the Report Appendices.
- 16-15 All the available geological related data was used in the Report, including the geophysical investigations, and the methods of analyses used included the standard petroleum geology technique of analysis. All available geologic literature on the area was reviewed, including reports on the Gas Company field, geotechnical boring logs, oil well logs, cone penetrometer logs (both new and existing) and extensive existing and new seismic imaging. Geomorphic analysis was employed. New geologic maps and cross-sections of the subsurface, based upon oil and gas wells and the seismic reflection data allowed the experts to come to an excellent understanding of the subsurface structure and stratigraphic framework under and near the project site. All data indicate no faulting on the project site. Refer to Section 4 of the report and Comment Letters #4 and 23.
- 16-16 Ethane, propane and butane are in a family of hydrocarbons with only single bonds. They share an origin with the thermogenic contribution of total methane, forming naturally with methane in oil-generating organic-rich sedimentary rocks (including the Pico formation). The April 17, 2000 ETI, Inc. report noted that ethane, propane and butane are coincident in occurrence with methane anomalies, corroborating this origin. Ethane is also less dense than

air so it will also tend to rise. Propane and Butane are heavier than air (although not as heavy as the BTEX gases).

The extensive methane mitigation system proposed for the project will adequately protect from these gases, which are at very low concentrations, and will be entrained in escaping methane.

16-17 Methane mitigations, which will address all other gases, such as BTEX, ethane, propane, and butane, and responsible parties are listed in Table 2-1 of the Report. Also see Responses to Comment 3-1, 3-9, 5-4, 13-9, 13-14, and 13-16.

16-18 See Responses to Comments 13-9 and 16-17.

**Comment Letter #17: John Geroch, Associate Engineering Geologist, Site Cleanup Unit I, California Regional Water Quality Control Board, Los Angeles Region**

Comments noted.

**Attached Memorandum from Julio Salinas, Ph.D. Hazardous Waste Toxicology Section, Office of Environmental Health Hazard Assessment to John Georch, LARWQCB**

OEHHA comments noted.

17-1 The City agrees that the use of screening criteria, such as low frequency of detection of pollutants, when determining health risks and the potential need to complete a full HRA must be carefully utilized, and requires concurrence from responsible regulatory agencies. Although the low frequency of detection of BTEX and H<sub>2</sub>S is cited in the report, as you note, a complete HRA was conducted utilizing all available data. The reference to the 5% frequency screening level has been deleted from the Report.

**Comment Letter #18: Suzanne M. DeBenedittis**

18-1 See Responses to Comments 2-1, 5-2, 5-4, and 5-5.

18-2 Comment noted.

**Comment Letter #19: Faye Ku**

19-1 See Response to Comment 3-10.

19-2 See Responses to Comments 3-1, 3-3, 3-4, 3-9, 5-2, 16-12.

19-3 See Response to Comment 13-9.



19-4 See Response to Comment 9-11 and 13-15

19-5 See Response to Comments 3-10, 5-5, 9-3.

**Comment Letter #20: Bryan Gordon**

20-1 The study design did not assume that a scenario could not exist that would render the site unsuitable for development. Step III of the study scope states: "The study will document any issues of concern for which adequate mitigations cannot be identified" (City of Los Angeles, Office of the Chief Legislative Analyst Office (CLA), July 2000, City Investigation of Potential Issues of Concern for the Community Facilities District No. 4 Playa Vista Development Project Draft Study Design and Scope of Work). Also see Responses to Comments 3-10 and 5-2.

20-2 See Response to Comment 16-6. Kleinfelder is an environmental consulting firm.

20-3 See Report Section 2 and Responses to Comments 5-2 and 13-9.

20-4 See Response to Comment 3-10.

20-5 See Response to Comments 2-1, 5-3, and 5-5.

**Comment Letter #21: Michael De La Torre, Southern California Gas Company**

Comments noted.

**Comment Letter #22: Kenneth E. Trott, Environmental Coordinator, California Department of Conservation**

22-1 Comments noted.

22-2 LADBS has documented permitting procedures that require written clearance by the State Department of Conservation, Division of Oil and Gas and Geothermal Resources, prior to the issuance of permits for projects where abandoned or active oil wells are identified on City Planning maps.

**Comment Letter #23: William Bryant, Program Manager, Active Faults, California Department of Conservation, Division of Geology and Mines (also see Comment Letter #4)**

Comments noted. See also Comment Letter #4.

**Comment Letter #25: Giyora Doeh**

Comments noted.

## SECTION 7

### References

The various City department and state agency review documents are included in the appendices of this report. The appendix location is indicated below.

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#### Appendix

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## **APPENDICES**